REFORMING WTO RULES ON STATE-OWNED ENTERPRISES

BY

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DISSERTATION

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ABSTRACT

The purpose of this research is to make proposals to the World Trade Organization (i.e., the WTO) rules to address the problem of granting advantages to state-owned enterprises (SOEs). SOEs tend to receive various advantages, including financial advantages, monopolies and exclusive, regulatory advantages and so on, leading to economic concerns. The problem is typical in the context of China. However, current WTO rules are not sufficient to address the problem of SOEs receiving various advantages.

The dissertation makes recommendations to improve them. It makes three types of proposals, i.e., trade remedies proposals, trade rules proposals, and competition rules proposals. It assesses these proposals in terms of the possibility of implementing them, particularly the political willingness of WTO Members to accept these proposals. Lastly, I lay out the framework for the competition rules proposals which prevail in my analysis.

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Abbreviations

SOEs	state-owned or controlled enterprises, referring to commercial enterprises in which the state is the majority shareholder, or the state is the controller
POEs	privately-owned or controlled enterprises, referring to commercial enterprises that are privately owned or controlled
FOEs	foreign-owned or controlled enterprises, referring to commercial enterprises that are owned or controlled by foreigners
SWFs	sovereign wealth funds
STEs	state-trading enterprises
State capitalism	any investment made by the state in enterprises, including SWFs and state owned entities
FCN Treaties	Treaty of friendship, commerce and navigation
CVDs	countervailing duties
OPEC	The Organization of the Petroleum Exporting Countries
OECD	Organization for Economic Co-operation and Development
TPP Agreement	Trans-Pacific Partnership Agreement
R&D	Research and Development
BRICS	Brazil, Russia, India, China, and South Africa
FDI	foreign direct investment
ECSC	European Coal and Steel Community
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
COMECON	The Council for Mutual Economic Assistance
SASAC	state-owned assets supervision and administration commission
FSU	The former Soviet Union
SOB	state-owned banks
AB	The Appellate Body in the WTO dispute settlement body
TRIMs	Agreement on Trade-Related Investment Measures
ADA	Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994
CCP	Chinese Communist Party

ECJ	European Court of Justice
VCLT	Vienna Convention on the Law of Treaties
ITO	International Trade Organization
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
TBT	Agreement on Technical Barriers to Trade
SCM Agreement	Agreement on Subsidies and Countervailing Measures
NAFTA	North American Free Trade Agreement
DSU	Dispute Settlement Understanding

Chapter 1: Introduction

1.1 The Theoretical Framework

This dissertation examines the problems of state-owned enterprises (SOEs) receiving various advantages from governments, and explores ways to solve the problems within the WTO framework by making recommendations, after analyzing the inadequacy of the WTO rules in this regard.

Chapter one examines the global presence of SOEs, broadly describes the problem to be addressed---the various advantages granted to SOEs, and explains why it is a problem from an historical and an economic perspective. First, I begin with a general overview of the presence of state capitalism globally, and the various advantages granted to SOEs, including financial advantages, monopolies and exclusive rights, regulatory advantages and other advantages. By examining SOEs' international activities, I find that SOEs are becoming more involved in international trade. I point out the severity of the problem of SOEs getting various advantages from their governments, and associated concerns which have arisen in the international community in this regard. Second, I examine the role of SOEs from an historical perspective. I trace the history of SOEs in the world economy and explain how the grant of advantages to SOEs has been perceived as more problematic over time. The presence of SOEs and grants of various advantages to them helped expand foreign markets before the 19th century. Due to interdependence and globalization since the Industrial Revolution, however, the presence of SOEs and grants of advantages to them have been gradually perceived as more problematic. Third, I explain why the existence of SOEs and their receipt of advantages are problematic from an economic perspective. I go through different economic theories underlying international trade and explain how grants of advantages to SOEs threaten to prevent achievement of the gains that those theories predict would result from international trade.

Chapter two examines the extent, nature, and effect of advantages granted to SOEs by looking at the problem of SOEs in the context of China. First, this Chapter begins with a general overview of the presence of SOEs in China and then looks at the extent to which SOEs are present in several

industries that are considered as key industries, such as the coal, civil aviation, petroleum and petrochemical, shipping building, telecommunications, automotive, steel, non-ferrous metals, machinery and equipment, and information technology sectors. In particular, it considers the extent to which Chinese SOEs get various advantages from the Chinese Government in the above industries and sectors. Second, I describe the nature of the advantages granted to SOEs in China by pointing out that SOEs are givers of advantages, such as capital and inputs. I describe the nature of financial advantages, the nature of advantages of monopolies and exclusive rights, and the nature of regulatory advantages in favor of SOEs. Third, I lay out the trade effects of advantages granted to Chinese SOEs. In particular, I consider the importance of the facts that China is a large trader and that Chinese SOEs play a significant role in international trade. This has caused concern at the international level regarding the grants of advantages and the behavior of SOEs. Last, I explain why there is little domestic incentive in China to deal with the problems from the perspectives of political economy theory, history and ideology. Hence, international rules are needed to deal with the problems.

Chapter Three examines the existing WTO rules addressing the problem and their weaknesses from a normative perspective. First, this Chapter examines the current WTO rules that are relevant to address the various advantages granted to SOEs and special rules that are applicable to China. Second, I explore potential ways to maximize existing WTO rules in order to solve the problem. Unfortunately, each potential way within the current WTO framework has weaknesses. I examine: i) the deficiency of rules regarding financial advantages granted to SOEs, such as the problem of SOEs giving advantages to other SOEs, the problem of upstream subsidies in the context of Chinese SOEs, privatization of SOEs, and the elements of "specificity" and "benchmark prices" for the situation of SOEs; ii) the deficiency of rules regarding advantages of monopolies and exclusive rights granted to SOEs in that the WTO allows the grants of monopolies and exclusive rights, and the regulation of the behavior of SOEs with monopolies or exclusive rights is inadequate in respect of discriminatory behavior, behavior not based on commercial considerations and anti-competitive behavior; iii) the inadequacy in rules regarding regulatory advantages granted to SOEs, particularly with respect to export restraints that favor SOEs; and iv) the inadequacy in Members' compliance with the notification and transparency requirements. Hence, I point out the

deficiency of existing WTO rules dealing with the problem, i.e., some issues that are not caught or disciplined by these rules.

Chapter Four puts forth my proposals for WTO rules to address the problems and the assessments of these proposals. First, proposals will be made respectively regarding the structure of separating rules disciplining SOEs receiving advantages from those that discipline POEs receiving advantages, and the coverage of rules applicable to trade in goods, trade in services, and trade related-investment. Three kinds of suggestions will be made, one is the trade remedies suggestion, one is the other trade rules suggestion, and the last one is the competition law elements suggestion.

In Chapter Five, first, I assess the possibilities of these proposals from the perspective of the WTO in general as an appropriate forum to implement proposals, i.e., the capacity of the WTO to adopt proposals dealing with state ownership, regulation of monopolies or exclusive rights, embodiment of competition rules, etc.; and the deficiency and difficulties of other forums (such as bilateral investment agreements or free trade agreements) in addressing the problems. Second, I assess the practical technical ways to embrace these proposals through aggressive interpretation of current WTO rules, through revising current WTO rules, or through negotiating a new set of rules. Last, I analyze the political willingness of WTO members to accept those proposals.

1.2 The Methodological Approaches

My essential methodological approach is the doctrinal approach. It is largely applied in Chapter Three in the legal analysis of existing WTO rules to demonstrate that they are not sufficient to address the problem of SOEs getting various advantages. I analyze rules in the Agreement on Subsidies and Countervailing Measures, rules regarding state-trading enterprises, and other relevant trade rules within the WTO agreements from the perspectives of textual interpretation, context interpretation, and purposive interpretation, as well as looking at supplemental documents and the negotiating history of the WTO rules. In addition, case analysis is applied by examining cases decided by panels and the Appellate Body.

In analyzing why grants of advantages to SOEs are problematic, I use the historical approach. Historically, the phenomenon of having SOEs and giving advantages to SOEs has changed from

having been perceived as non-problematic in times of an isolated world, i.e., little commercial trade among nations, to problematic in times of globalization and interdependence among nations. First, I look at the phenomenon of SOEs in a larger historical context, considering the relationship between governments and commercial enterprises in general, and the extent to which SOEs were established and granted advantages. Second, I find three factors historically contributed to the establishments of SOEs and granting advantages to them: one is the wish to promote domestic social and economic development; one is the underlying political philosophy of some governments, especially those adhering to Marxist theory, that governments should have the predominant or exclusive role in society or in some industries; and the last factor is a desire to compete more efficiently in global markets. Over time, the second factor has largely transformed into either the first or third factor due to the collapse of Communism and the growth of market-oriented economic reforms.

In analyzing why grants of advantages to SOEs are problematic, I also use the economic approach. First, I go through different economic theories, including the comparative advantage theory and the new trade theories, to explain why international trade is good in that it increases world welfare and efficiency. Second, I examine different economic arguments and theories, including the terms of trade argument, the strategic trade argument, and the political economic theory to explain why international trade agreements are good and are necessary to avoid negative externalities and trade wars. Last, I explain how grants of advantages to SOEs undermine international trade and international trade agreements from two perspectives, one is related to world welfare effects, and the other is related to undermining the benefits obtained from international trade agreements.

In describing the presence of Chinese SOEs and the extent of advantages they get from the Chinese Government, I use the empirical approach to collect information through looking at annual reports from 2007 to 2014 of top Chinese SOEs which are publicly-traded on stock exchanges. In the coal, civil aviation, petroleum and petrochemical, shipping building, telecommunications, automotive, steel, non-ferrous metals, machinery and equipment, and information technology industries, I give examples of major SOEs; their dominance or significant presence; their monopoly/oligopoly status, which is also related to advantages of monopolies and exclusive rights SOEs enjoy by law or in fact; the financial advantages they get; and the regulatory advantages they enjoy.

I use the comparative approach in Chapter four in recommending proposals for the WTO. In light of the European Union rules and the Trans-Pacific Partnership Agreement in terms of their methods of solving the problem of SOEs receiving various advantages, I come up with detailed proposals for the WTO.

1.3 Literature Review and My Contribution

There are several ways to regulate SOEs receiving advantages. First, one could regulate SOEs per se: i.e., the permissibility of SOEs; second, the behavior of SOEs could be regulated in general; third, the behavior of SOEs could be regulated to the extent that they receive advantages; and fourth, various advantages that are granted to SOEs could be regulated. There are two dimensions that can be provided to examine the whole picture, one is the international trade law dimension, and the other is the competition law dimension. There are three kinds of fora where the problems can be discussed, i.e., at the national level, at the regional level, and at the international level (including BITs/FTAs). Two kinds of law can be evaluated, i.e., one is soft law, and the other is hard law. This dissertation focuses only on the third and fourth issues primarily from an international trade perspective, particularly within the WTO, which is hard law, and a little bit from the competition law perspective. This is partially due to the limited content that can be covered by this dissertation. Also, my premise is that the existence of SOEs per se is not the essential problem, rather, the underlying problems are (i) the disproportionate granting of advantages to SOEs (compared to POEs) and (ii) the behavior of SOEs to the extent that they receive advantages. In addition, by focusing only on certain advantages as far as SOEs are concerned, political resistance from countries with significant presence of SOEs can be reduced.

As of one or two years ago, the literature on SOEs recognized that the receipt of advantages by SOEs is a problem, but the literature did not present a thorough legal analysis of the problems and did not propose detailed solutions. Most legal analyses were about enterprises receiving advantages from governments in general, without a further distinction between receipts of

advantages by SOEs and receipts of advantages by POEs.[1] They pointed out the severe nature of the problem and briefly outlined the relevant rules covering international trade, investment and competition.[2] Even if some recommendations were given, these recommendations were merely general. Nevertheless, new developments took place in literature in the last one or two years due to the issue of SOEs drawing more attention and concerns.

Recent developments in literature have begun to fill the two gaps in some degree, but not comprehensively. With respect to legal analysis tailored to SOEs, in analyzing whether there is a need to regulate competitive advantages enjoyed by SOEs solely because of their state ownership, one recent article points out the difference between SOEs and POEs in terms of objectives, characteristics, decision-making and accountability.[3] This dissertation analyzes the need to address the competitive advantages enjoyed by SOEs from historical and economic perspectives. With regard to legal analysis, recent literature also analyses whether SOEs are public bodies or not, and the implications of different standards of "public bodies" for Chinese SOEs,[4] and criticizes the method of interpretation by the AB at the WTO regarding the term "public body" and its flaws.[5] It mainly focuses on the legal status of SOEs within the WTO. My legal analysis pushes the current WTO rules to their limit, and analyzes whether different approaches might be utilized within the WTO rules to solve the problem of SOEs giving advantages to others SOEs. My proposal regarding the definition of "public body" is based on my legal analysis which combines the factors of "meaningful control" and "monopolistic/dominant market power". The latest literature also

[1] Aaron Cosbey and Petros C. Mavroidis. "A turquoise mess: green subsidies, blue industrial policy and renewable energy: the case for redrafting the subsidies agreement of the WTO." 17 *Journal of International Economic Law* (2014): 11-47.

[2] Michael M. Du (Ming Du), "China's State Capitalism and World Trade Law" 63 (2) *International and Comparative Law Quarterly* (Jan. 11, 2014): 409-448. http://ssrn.com/abstract=2377797 ; The existing literature talks about the weaknesses of rules in general regarding subsidies and state trading, without specifically targeting or detailing advantages granted to SOEs. Hence, there is a mismatch or gap between the current rules and the reality of the problem of SOEs receiving various advantages from governments.

[3] Ines Willemyns, "Disciplines on State-Owned Enterprises in International Economic Law: Are We Moving in the Right Direction?." 19(3) *Journal of International Economic Law* (2016): 657-680.

[4] Ru Ding, "'Public Body' or Not: Chinese State-Owned Enterprise," 48 (1) *Journal of World Trade* 167 (2014).
Dukgeun Ahn, "United States – Definitive Anti-Dumping and Countervailing Duties on Certain Products from China," 105 (4) *American Journal of International Law* (2011), available at SSRN: http://ssrn.com/abstract=1864025
Tegan Brink, "What Is a 'Public Body' for the Purpose of Determining a Subsidy after the Appellate Body Ruling in US – AD/CVD?," 6 *Global Trade and Customs Journal* (2011): 313–315.

[5] Michel Cartland, Gerard Depayre & Jan Woznowskl, "Is Something Going Wrong in the WTO Dispute Settlement", 46 (5) *Journal of World Trade* (2012): 979-1016, pp. 1001-1015.

analyzes the weaknesses of GATT Article XVII in addressing SOEs' behavior.[6] However, the issue of grants of monopolies and exclusive rights are not addressed by current literature, and I analyze how current WTO rules can be used to attack the grants of monopolies and exclusive rights to SOEs, and the deficiencies in those rules. One recent article talks about export cartels as far as state-driven exports through SOEs are concerned. However, it only discusses the problem in the context of applying domestic competition laws of the importing country, and implies that from an antitrust perspective, export cartels involving SOEs pose a challenge for antitrust regimes.[7] The type of regulatory advantages enjoyed by SOEs are not analyzed from a legal perspective within the WTO framework in detail, and no proposals are put forth by current literature in this regard. One article examines the deficiency in disciplining the telecommunications sector within the WTO, but it is about the telecommunications sector in general, rather than SOEs in this sector in particular, and about focusing on limitations on FOEs, rather than advantages to SOEs.[8] Recent literature also examines how China's Protocol of Accession has not been effective at solving concerns about Chinese SOEs, and the limitations in using the WTO as a vehicle to promote economic reform.[9] However, it is about SOEs in general, rather than different types of advantages associated with SOEs. My legal analysis also points out that the legal analysis of current WTO rules as applied to situations of SOEs in the context of advantages is different from the legal analysis as applied to situations of POEs in the context of advantages. Such differences challenge the ability of current WTO rules to address the problem of advantages granted to SOEs.

Recent literature also looks at the non-transparency of SOEs in that little information can be obtained through subsidiaries bodies within the WTO, and the current mega-regional negotiations

[6] Gary Clyde Hufbauer and Cathleen Cimino-Isaacs, "How will TPP and TTIP Change the WTO System?." 18 *Journal of International Economic Law* (2015): 679-696.
[7] Marek Martyniszyn, "Export cartels: Is it legal to target your neighbor? Analysis in light of recent case law." 15(1) *Journal of International Economic Law* (2012): 181-222. Andrea Mastromatteo, "WTO and SOEs: Overview of Article XVII and related provisions of the GATT 1994," Working paper for the Columbia Law School, Trade Seminar Series, Fall 2016, State-Owned Enterprises in China: Trade and Competition Issues.
[8] Tania Voon and Andrew Mitchell, "Open for Business? China's Telecommunications Service Market and the WTO." 13(2) *Journal of international economic law* (2010): 321-378.
[9] Philip I. Levy, "The Treatment of Chinese SOEs in China's WTO Protocol of Accession," Working Paper, November 2, 2016. There exists literature talking about the relationship in general between Accession Protocols and the WTO Agreements, see Julia Y. Qin, "Mind the Gap: Navigating Between the WTO Agreement and Its Accession Protocols," Wayne State University Law School Legal Studies Research Paper Series, No. 2016-05, in M. Elsig, B. Hoekman & J. Pauwelyn, eds., The World Trade Organization: Past Performance and Ongoing Challenges, http://www.ssrn.com/link/Wayne-State-U-LEG.html

can do little to help improve SOE transparency due to limitation of their rules and lack of institutional support. One author calls for more transparency of Chinese SOEs and proposes a Reference Paper, inscribed in the Schedules of participating Members.[10] However, the key point lies in the lack of regulations specific to SOEs at the WTO, leading to poor transparency of SOEs. Hence, mere procedural provisions are not enough, and substantive provisions should be proposed. Regarding the information, I did my empirical finding by looking at ten industries to find various advantages granted to giant SOEs, and summarized the nature of each type of advantage.

An earlier piece of literature talks about subsidies associated with SOEs in the context of privatization, which, however, has less significance in the current Chinese economy. It also talks about subsidization in the context of STEs which are in competitive markets with POEs. It looked at subsidies granted to SOEs from the viewpoint of why subsidies were granted. It perceived the special challenge as "how to balance the need of China to use subsidies in furthering its SOE reform on the one hand, and the need to protect the trade interests of other members from adverse effects of such subsidies on the other hand."[11] However, the challenge nowadays is more about competitive advantages granted SOEs and their behavior afterwards. The author also argued that China's Accession Protocol regarding "specificity" applied to SOEs lacks an economic rational, and contended that subsidies to SOEs are not more trade-distorting than subsidies to POEs. My assertion is different from that due to my analysis that trade-distorting effects of advantages associated with SOEs are more severe from an economic perspective, and the behavior after SOEs receiving advantages is of more concern as compared to POEs.

With respect to recommendations specific to SOEs, the newest and latest literature[12], relying on the TPP Agreement, and FTAs signed by the U.S., and doing legal analysis of current BITs, FTAs and the TPP Agreement regarding SOEs, looks at the whole picture, and put forth proposals of

[10] Robert Wolfe, "Sunshine over Shanghai: Can the WTO illuminate the murky world of Chinese SOEs?" Paper prepared for the seminar on "Sate Owned Enterprises (SOEs) in China: Trade and Competition Issues", Columbia Law School, November 21, 2016.
[11] Julia Ya Qin, "WTO Regulation of Subsidies to State-Owned Enterprises (SOEs)- A Critical Appraisal of the China Accession Protocol," 7(4) *Journal of International Economic Law*: 863-919, p. 882.
[12] Julien Sylvestre Fleury and Jean-Michel Marcoux, "The US Shaping of State-Owned Enterprise Disciplines in the Trans-Pacific Partnership." 19 *Journal of International Economic Law* (2016): 445-465; Ines Willemyns, "Disciplines on State-Owned Enterprises in International Economic Law: Are We Moving in the Right Direction?." 19(3) *Journal of International Economic Law* (2016): 657-680.

disciplining SOEs in general from a norm development perspective.[13] The authors propose norms specific to SOEs, covering the definition of SOEs, the scope and exclusions of SOEs, acting in accordance with commercial considerations, non-discriminatory treatment, non-commercial assistance, domestic courts and administrative bodies, exceptions, transparency, and dispute settlement. However, their proposal regarding non-commercial assistance is not in detail. My proposal is mainly about non-commercial assistance, particularly the monopolies and exclusive rights granted to SOEs. Current literature doesn't analyze or go in detail about different kinds/types of advantages in legal analysis and proposals; i.e., proposals talk about all advantages in general without distinction among different types of advantages. In addition, they didn't analyze how the new norms can be implemented, through which forum, and whether norms can be internationalized. My contribution lies in, putting forth three different suggestions, analyzing how my suggestions can be realized pragmatically, particularly in the framework of the WTO, analyzing why other forums do not work so well, and assessing them from political and legal technical perspectives. I look for solutions within the WTO framework, which is more pragmatic.

Last, my dissertation is a systematic analysis tailored to the problem of various advantages granted to SOEs and their behavior afterwards. My contribution is the detailed analysis of the inadequacy of current WTO rules and my various proposals, which are carefully analyzed.

[13] From a norm development perspective, at the very beginning, only one country adopts a new norm. Afterwards, if many more countries adopt the norm, there is a process of socialization. Finally, the norm life cycle concludes with a process of internationalization.

Chapter 2: The Global Presence of SOEs and the Problem of SOEs Receiving Advantages

The focus of this dissertation is the treatment by governments of their state-owned enterprises (SOEs). This Chapter broadly describes the problem to be addressed, i.e., the various advantages granted to SOEs, and explains why it is a problem from an historical and an economic perspective. In addition, it explains why governments grant advantages to SOEs. It is important to examine the problem from these different perspectives to provide a context for the analysis of current legal rules and possible proposals to improve them.

In Section I, I begin with a general overview of the presence of state capitalism globally and its involvement in international trade. Then I point out the problems that arise when SOEs receive various advantages from their governments, and associated concerns arising in the international community. These advantages can be categorized into financial advantages, monopolies and exclusive rights, regulatory advantages and others. Also, this section will describe the scope of my dissertation from the aspect of subjects (SOEs, not SWFs), types of advantages, fields (trade, not investment), and concerns (economic, not political). In Section II, I trace the history of SOEs and explain how the grant of advantages to SOEs has been perceived as more problematic over time. I also look at the phenomenon of SOEs in a larger context, considering the relationship between governments and commercial enterprises in general, and the extent to which SOEs have been established and granted advantages. In Section III, I explain why the existence of SOEs is a problem from an economic perspective. I go through different economic theories underlying international trade and explain how grants of advantages to SOEs threaten to prevent achievement of the gains that those theories predict would result from international trade. I then explain whether there is a need to regulate the various advantages granted to SOEs at the international level and whether potential exceptions should be recognized. Last, I conclude.

2.1 The Presence of SOEs Globally and the Grants of Advantages to SOEs

2.1.1 State Sector Globally

State capitalism[14] is omnipresent in the global economy.[15] There are various forms of state capitalism, including SOEs, SWFs and so on. My focus, however, is mainly SOEs. Looking at the data and information about SOEs' number, size, sector distribution and country distribution, it can be inferred that SOEs are pervasive globally, particularly in emerging countries.

[14] There is an extensive literature that analyzes state capitalism, including its definitions, its various forms, whether the state capitalism is a good economic model, and its impact on nations and the global trading system. Bremmer distinguishes state capitalism from command economies and free market economies. The state functions as the leading economic actor and uses markets primarily for political gain. The state uses SOEs and SWFs, or selects POEs to maximize the state's profits. The ultimate motive is not economically maximizing growth but politically maximizing the state's power and the leadership's chances of survival. *See* Ian Bremmer, "State Capitalism Comes of Age," *Foreign Affairs*, Vol. 88, Iss. 3 (May/Jun 2009): 40. https://www.scribd.com/doc/89651394/Bremmer-State-Capitalism-Comes-of-Age; Musacchio and Lazzarini describe state capitalism as being the "widespread influence of the government in the economy, either by owning majority or minority equity positions in companies and/or through the provision of subsidized credit and/or other privileges to private companies". *See* Aldo Musacchio and Sergio G. Lazzarini, *Reinventing State Capitalism: Leviathan in Business, Brazil and Beyond* (Cambridge, MA: Harvard University Press, April 2014), 12; *See* Also "The Rise of State Capitalism," Emerging-Market Multinationals, *The Economist*, Jan 21st, 2012. http://www.economist.com/node/21543160; "The Visible Hand," Special Report: State Capitalism, *The Economist*, Jan 21st, 2012.
http://www.economist.com/node/21542931; Ian Bremmer, "State Capitalism Comes of Age: The End of the Free Market?" Essay, *Foreign Affairs*, May/June 2009 Issue.
https://www.foreignaffairs.com/articles/united-states/2009-05-01/state-capitalism-comes-age;
Aldo Musacchio and Sergio G. Lazzarini, "Leviathan in Business: Varieties of State Capitalism and Their Implications for Economic Performance" (working paper 12-108, Harvard Business School, June 4, 2012), 2. http://www.hbs.edu/faculty/Publication%20Files/12-108.pdf ; Murray N. Rothbard, "A Future of Peace and Capitalism," in *Modern Political Economy*, ed. James H. Weaver (Boston: Allyn and Bacon, 1973), 419-430; Michael M. Du, "China's State Capitalism and World Trade Law," 63 (2) International and Comparative Law Quarterly 409, 409-448 (2014).

[15] An investigation of the world's largest 2000 public companies (Forbes Global 2000) reveals that more than 10% of these firms are majority state-owned. *See* Kowalski, P. et al., "State-Owned Enterprises: Trade Effects and Policy Implications", OECD Trade Policy Papers, No. 147 (OECD Publishing, 2013), 9. http://dx.doi.org/10.1787/5k4869ckqk7l-en ; for more information about state capitalism in general, *see* World Bank, "Bureaucrats in Business," World Bank Policy Research Report (Washington, DC: World Bank, 1995), 29; OECD Corporate Affairs Division, Directorate for Financial and Enterprise Affairs, "SOEs Operating Abroad: An Application of the OECD Guidelines on Corporate Governance of State-Owned Enterprises to the Cross-border Operations of SOEs" (Paris: OECD), 3. https://www.oecd.org/daf/ca/corporategovernanceofstate-ownedenterprises/44215438.pdf ; National Intelligence Council, *Global Trends 2025: A Transformed World* (US Government Printing Office, November 2008), 10-11. www.dni.gov/nic/NIC_2025_project.html

(1) The Definition of SOEs

State investment is present in the global economy through the forms of state fully-owned enterprises, state-controlled enterprises, enterprises with minority state ownership, sovereign wealth funds (SWFs),[16] public pension funds, reserve funds, life insurance funds and so on.[17] The reason that I narrow my focus to SOEs is that, first, this dissertation doesn't deal with the international financial system, which includes SWFs and other funds.[18] Second, I focus on enterprises that produce goods and services rather than entities that merely have capital investment. SWFs usually do not produce goods or services, but rather invest in other entities. Third, it is rare for governments to grant monopolies and regulatory advantages to SWFs.[19] Even if states give financial advantages to SWFs, these advantages are used to acquire investments. Advantages granted to SWFs have different effects from advantages directly granted to SOEs that produce goods or services.[20] Last, states tend to pursue political goals through SWFs rather than economic goals.[21] Hence, my focus is on SOEs that buy or sell goods or services, rather than stocks or bonds.

[16] For a definition of sovereign wealth funds, *see* "What is a SWF? About Sovereign Wealth Funds," Sovereign Wealth Fund Institute (SWFI). http://www.swfinstitute.org/sovereign-wealth-fund/ (accessed Aug. 28, 2016); International Monetary Fund, "Sovereign Wealth Funds---A Work Agenda," Prepared by the Monetary and Capital Markets and Policy Development and Review Departments in Collaboration with other departments, Approved by Mark Allen and Jaime Caruana (Feb. 29, 2008), 5. http://www.imf.org/external/np/pp/eng/2008/022908.pdf ; Kathryn Gordon and David Gaukrodger, "Foreign Government-Controlled Investors and Host Country Investment Policies: OECD Perspectives" in *Sovereign Investment: Concerns and Policy Reactions*, eds., Karl P Sauvant, Lisa E. Sachs, and Wouter P.F. Schmit Jongbloed (New York: Oxford University Press, 2012), 496, 497. The situation of controlling a fund/enterprise by holding a minority shares as part of SWF is different from governmental controlling an enterprise through a minority shares. The latter is rare in the context of China.

[17] Aldo Musacchio and Sergio G. Lazzarini, "Leviathan in Business: Varieties of State Capitalism and Their Implications for Economic Performance" (working paper 12-108, Harvard Business School, June 4, 2012), 2. http://www.hbs.edu/faculty/Publication%20Files/12-108.pdf

[18] For a discussion regarding the distinction between international trade and international finance (international capital markets), *see* Michael Gadbaw, "Systemic Regulation of Global Trade and Finance: A Tale of Two Systems," in *International Law in Financial Regulation and Monetary Affairs*, eds., Tomas Cottier, John Jackson and Rosa Lastra (UK: Oxford University Press, Jan. 2013). *See* also Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 1-7.

[19] Robert Loring Allen, "State Trading and Economic Warfare," 24 *Law and Contemporary Problems* 256-275, 264 (Spring 1959).

[20] Hong Li, "China Investment Corporation: A Perspective on Accountability," 43 (4) *International Lawyer* 1495 (2009).

[21] Aldo Musacchio and Sergio G. Lazzarini, "Leviathan in Business: Varieties of State Capitalism and Their Implications for Economic Performance" (working paper 12-108, Harvard Business School, June 4, 2012), 2. http://www.hbs.edu/faculty/Publication%20Files/12-108.pdf

As to which enterprises I look at, I apply two criteria similar to the ones used by the World Bank.[22] One criteria is whether the enterprise in question has business operations, such as producing goods or services; and the other is whether the enterprise is controlled by the state through majority ownership, management, or other means.[23] Hence, my focus is on government-controlled commercial enterprises (SOEs) that produce goods or services.[24]

(2) SOEs in the Global Economy

There are some data sources about the significant presence of SOEs in the global economy. They use different methods for the purpose of estimation. One method uses a sample of world's largest firms and their subsidiaries as a base, and then counts the number of SOEs in that base.[25] Some sources count the number of SOEs in the Forbes Global 2000 list, which is approximately 200 on average.[26] Overall, the number of large SOEs is increasing, comprising 10% of world's 2000 largest companies.[27] That estimate is for the year of 2011. I did my own count of the number of SOEs in the Top 10 companies globally from 2000 to 2015. (See Table 1 below).

[22] There might be some deviations across different definitions of SOEs. The definition that SOEs are "government owned or government controlled economic entities that generate the bulk of their revenues from selling goods and services", is used by the World Bank in its research report. *See* World Bank, "Bureaucrats in Business," World Bank Policy Research Report (Washington, DC: World Bank, 1995), 26.

[23] The state might also exert de facto control over a firm through holding a minority share such as a golden share or any other specific enabling legislation, *see* Max Büge, Matias Egeland, Przemyslaw Kowalski and Monika Sztajerowska, "State-owned Enterprises in the Global Economy: Reason for Concern?" VOX: CEPR's Policy Portal, May 2, 2013. http://voxeu.org/article/state-owned-enterprises-global-economy-reason-concern

[24] I focus on these SOEs that are controlled by governments. As for some measures that governments may adopt or use to control the behavior of enterprises, such as threats, connections among governmental officials and managers in enterprises (for instance, they all come from the same educational institutes and the elites), etc., such influence or control is less powerful and indirect as compared to the direct and powerful influence over the enterprises through ownership.

[25] *See* Kowalski, P. et al., "State-Owned Enterprises: Trade Effects and Policy Implications", OECD Trade Policy Papers, No. 147 (OECD Publishing, 2013). http://dx.doi.org/10.1787/5k4869ckqk7l-en

[26] There were 204 SOEs in the year 2010-2011 out of 2000 largest companies listed on Forbes Global, *see* Grzegorz Kwiatkowski and Pawel Augustynowicz, "State-owned Enterprises in the Global Economy-Analysis Based on Fortune Global 500 List," (Conference Paper, Management, Knowledge and Learning Joint International Conference 2015, held by Managing Intellectual Capital and Innovation for Sustainable and Inclusive Society, 27-29 May 2015, Bari Italy), 1740. http://www.toknowpress.net/ISBN/978-961-6914-13-0/papers/ML15-353.pdf

[27] Max Büge, Matias Egeland, Przemyslaw Kowalski and Monika Sztajerowska, "State-owned Enterprises in the Global Economy: Reason for Concern?" VOX: CEPR's Policy Portal, May 2, 2013.

Table 1 The Number of SOEs in the Top 10 Companies Globally

Year	2000	2002	2004	2006	2008	2010	2012	2014	2015
Number of SOEs	1	1	1	0	0	3	4	3	5
Nationality of the SOEs	China	US (Fannie Mae)	US (Fannie Mae)			China	US (Fannie Mae) China 3	China	China

Data sources: Forbes, Fortune, and my calculations.[28]

Apart from the number of SOEs, the size and weight of SOEs in the global economy also signals the pervasive presence of SOEs. Therefore, the second method uses the value of SOEs of some countries relevant to their GDP and labor/employment. (See Table 2 below).[29] However, the data only encompasses OECD countries and emerging countries. In addition, the data about Brazil, China, India and Russia was collected in 2008. Many changes have taken place since 2008.

Table 2 SOEs Share of GDP and Employment in OECD and Emerging Countries in 2008

	OECD countries	China (2008)	Russia (2008)	India (2008)	Brazil (2008)
SOEs share of GDP	From near-zero to 13%	1/3	1/3	13%	10%
SOEs share of employment	From near-zero to 15%	1/3	1/3	6%	10%

The third method selects a sample of the 2000 largest global companies as the database, and then calculates the weighted average of SOE shares of sales, assets and market values. The 204 SOEs account for 10% of sales in the sample of the 2000 largest companies, and 11% of market value correspondingly. With respect to the distribution of SOEs by sector, the top sectors with high presence of SOEs are mining, civil engineering, transportation, petroleum and natural gas, as

[28] My calculation is based on databases such as Fortune (Fortune Global 500), Forbes (Forbes Global 2000), Orbis, World Development Indicator by World Banks. For instance, there was no SOE among the top 10 firms of the Fortune Global 500 list in 2005. However, there were three SOEs among the top 10 in 2013, all of which were Chinese SOEs, i.e., Sinopec Group, China National Petroleum and State Grid. *See* "Global 500: the tope 10," *Fortune*, http://money.cnn.com/magazines/fortune/global500/2013/full_list/ (accessed September 2, 2016)

[29] *See* Hans Christiansen, "The Size and Composition of the SOE Sector in OECD Countries", OECD Corporate Governance Working Papers, No. 5, (OECD Publishing, 2011); OECD Working Group on Privatisation and Corporate Governance of State-Owned Assets, "The Role of State-Owned Enterprises in the Economy: An Initial Review of the Evidence," DAF/CA/PRIV (2008) 9, 18 Nov. 2008; OECD Working Group on Privatisation and Corporate Governance of State Owned Assets, "State-Owned Enterprises in India," DAF/CA/PRIV/RD(2008)15, 18 Nov. 2008;

shown in Table 3.[30] Sector distribution varies depending on the country in which SOEs are located. In OECD countries, top sectors with high presence of SOEs are providers of electricity, gas and steam, and the manufacturers of tobacco, as shown in Table 4 below, while in emerging countries, top sectors with high presence of SOEs are mainly the natural resources, manufacturing, financial and telecommunication sectors, as shown in Table 5.[31]

Table 3 Top Sectors with High Presence of SOEs Globally in 2011

Sectors	Mining support activities	Civil engineering	Land transport and transport via pipeline	Mining of coal and lignite	Extraction of crude petroleum and gas
SOEs shares %	42.7	40.8	40.3	35.1	34.1

Table 4 Top Sectors with High Presence of SOEs in OECD Countries in 2011

Sectors	Provision of electricity, gas and steam	Manufacture of tobacco	Warehousing	Manufacture of motor vehicles	Financial intermediation
SOEs share %	18.3	15	11.7	6.7	6.7

Table 5 Top Sectors with High Presence of SOEs in Emerging Countries (Particularly BRICS Countries) in 2011

Sectors	Mining support activities	Civil engineering	Land transport and transport via pipelines	Mining of coal and lignite	Extraction of crude petroleum and gas	Manufacture of fabricated metal and basic metals	Financial intermediation	Telecommunication	Electrical equipment & machinery and equipment	Air transport
SOEs share %	42.7 (Mainly from China)	40.8 (Mainly from China)	40.3 (Mainly from China)	35.1 (Mainly from China)	26.5	12.9+ 9.1= 22	12.4	10.3	8.3+ 7.7= 16	7.3

With respect to the distribution of SOEs by country, there is information about SOEs among 150 publicly traded companies by country.[32] The top ten countries with highest "country SOEs

[30] Kowalski, P. et al., "State-Owned Enterprises: Trade Effects and Policy Implications", OECD Trade Policy Papers, No. 147 (OECD Publishing, 2013), 29. http://dx.doi.org/10.1787/5k4869ckqk7l-en

[31] OECD, "Corporate Governance of State-Owned Enterprises: A Survey of OECD Countries" (Paris: OECD Publishing, 2005); Kowalski, P. et al., "State-Owned Enterprises: Trade Effects and Policy Implications", OECD Trade Policy Papers, No. 147 (OECD Publishing, 2013), 30. http://dx.doi.org/10.1787/5k4869ckqk7l-en

[32] Kowalski, P. et al., "State-Owned Enterprises: Trade Effects and Policy Implications", OECD Trade Policy Papers, No. 147 (OECD Publishing, 2013), 22-25.

shares"[33] are China, followed by United Arab Emirates, Russia and Indonesia. Seven out of ten are emerging countries or developing countries, as shown in Table 6.[34] Taking the proposed TPP Agreement as an example, some Members of the TPP Agreement have SOEs, such as Vietnam, New Zealand, Singapore and Chile.[35] Thus, it can be inferred that even in the absence of China, the presence of SOEs in the global economy is still significant. Hence, the problem is not only a Chinese one, but rather a universal one.

Table 6 Top Countries with High "Country SOEs Shares" in 2011

Name of the country	China	The United Arab Emirates	Russia	Indonesia	Malaysia	Saudi Arabia	India	Brazil	Norway	Thailand
Country SOEs shares	95.9	88.4	81.1	69.2	68	66.8	58.9	49.9	47.7	37.3
Emerging country or not	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes

The presence of SOEs in OECD countries is quite different from that in emerging countries. The difference can be observed from aspects of the sectors they are in, their size, and their weight in the economy.[36] In OECD countries, most data also counts enterprises with golden shares held by the government as SOEs.[37] While in emerging countries, databases usually exclude enterprises with golden shares held by the government as SOEs.[38] SOEs were declining due to privatization, particularly in OECD countries over the past decades. In contrast, the extent and scope of privatization is less in emerging countries, and the retreat of SOEs has slowed down in some

[33] Country SOEs shares (CSS) is a weighted average of SOE shares of sales, assets and market values among country's top ten companies. *See* Kowalski, P. et al., "State-Owned Enterprises: Trade Effects and Policy Implications", OECD Trade Policy Papers, No. 147 (OECD Publishing, 2013), 22. http://dx.doi.org/10.1787/5k4869ckqk7l-en

[34] Data comes from Forbes, World Development Indicator by World Banks, Orbis database, Forbes Global 2000, and my calculation.

[35] William Krist and Kent HugHes, "Negotiations for a Trans-Pacific Partnership Agreement," *Wilson Center: Trade and Development*, Dec. 4, 2012, https://www.wilsoncenter.org/publication/negotiations-for-trans-pacific-partnership-agreement; Ian F. Fergusson, Mark A. McMinimy and Brock R. Williams, "The Trans-Pacific Partnership (TPP) Negotiations and Issues for Congress," Congressional Research Service, 7-5700 R42694 (20 Mar. 2015), 43, in its footnote 116 quoting "Economist Intelligence Unit," Vietnam Country Report, (Mar. 2012), 12.

[36] Hans Christiansen, "The Size and Composition of the SOE Sector in OECD Countries" OECD Corporate Governance Working Papers, No. 5, (OECD Publishing, Paris, 2011), 7-8. http://dx.doi.org/10.1787/5kg54cwps0s3-en

[37] *Id*., at 72.

Max Büge, Matias Egeland, Przemyslaw Kowalski and Monika Sztajerowska, "State-owned Enterprises in the Global Economy: Reason for Concern?" VOX: CEPR's Policy Portal, May 2, 2013.

countries.[39] For instance, evidence can be found that the oil and energy sector are monopolized by SOEs in the Middle East, and the strategic industries are dominated by SOEs in countries such as Russia, Brazil, China, and Vietnam.[40] Nowadays, the model of state capitalism has been embraced by many countries, such as China, Russia, Brazil and South Africa.[41]

Other sources of information are scarcer. State-backed companies account for 80% of the value of China's stock market and 62% of Russia's.[42] Taking the oil and energy sector for an example, there are national oil companies that are Middle Eastern SOEs (Dubai), Russian SOEs (Gazprom), Chinese SOEs, and Brazilian SOEs, some of which are publicly traded with their governments remaining as the majority shareholders.[43] The world's ten biggest oil-and-gas firms, measured by reserves, are all SOEs.[44] Nationalization in recently years in Latin America is also worthy of attention.[45]

In short, whatever the measure used, it is clear that SOEs are pervasive globally.

2.1.2 SOEs Receive Various Advantages from Their Governments

The various advantages granted to SOEs by governments can be categorized into three types, i.e., financial advantages, monopolies and exclusive rights, and regulatory and other advantages.[46] The

[39] Hans Christiansen, "The Size and Composition of the SOE Sector in OECD Countries", OECD Corporate Governance Working Papers, No. 5, (OECD Publishing, 2011), 3. Jeremy Schwartz, "Emerging Markets and State-Owned Enterprises," *NASDAQ*, Dec. 05, 2014. http://www.nasdaq.com/article/emerging-markets-and-state-owned-enterprises-cm420401

[40] Keith Bradsher, "Trans-Pacific Partnership's Potential Impact Weighed in Asia and U.S." International Business, *New York Times*, July 8, 2015.

[41] "The Rise of State Capitalism," Emerging-Market Multinationals, *The Economist*, Jan 21st, 2012. http://www.economist.com/node/21543160 ; Sprenger, "The Role of State Owned Enterprises in the Russian Economy," (paper written for the OECD Roundtable on Corporate Governance of SOEs. 2008).

[42] "The Rise of State Capitalism," Emerging-Market Multinationals, *The Economist*, Jan 21st, 2012.

[43] Seven out of the 10 largest oil companies are state owned, they are Saudi Aramco, Gazprom (Russia), National Iranian Oil Company, Rosneft (Russia), PetroChina, Pemex (Mexico), Kuwait Petroleum Company. http://www.forbes.com/pictures/mef45miid/1-saudi-aramco/

[44] "The Rise of State Capitalism," Emerging-Market Multinationals, *The Economist*, Jan 21st, 2012.

[45] "Nationalization in Latin America", Infographic, *The Globe and Mail*, Jul. 11, 2012. http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/nationalization-in-latin-america/article4409002/ ; John Paul Rathbone, "Latin American Nationalization Dominoes," *Blogs.ft.com*, May 2, 2012. http://blogs.ft.com/the-world/2012/05/latin-american-nationalisation-dominoes/

[46] For a general discussion on special privileges enjoyed by SOEs, *see* Richard R. Geddes, "Case Studies of Anticompetitive SOE Behavior," in *Competing with the Government, Anticompetitive Behavior and Public*

three categories of advantages or benefits have something in common, i.e., they all put SOEs in a better position from an economic perspective. The reason for the categorization is that advantages granted in different forms may result from different policy choices and have distinct characteristics, and hence are worthy of different treatments.

(1) Financial Advantages

The financial advantages granted to SOEs can be divided into government expenditures and government revenues foregone. These advantages have following forms:[47] 1) direct money transfers to SOEs; 2) provision of goods or services at below-market prices to SOEs, for instance, SOEs may be given privileged access to government-owned or controlled natural resources, land, or rights of way; 3) financing and guarantees from the government, such as credit, below-market interest rates, and state guarantees for loans taken out by SOEs through banks, particularly SOBs. State guarantees for loans by SOEs means that the government assumes the risk of default on the loan, rather than the bank, which in turn means that the bank can offer the borrower more favorable lending terms, such as a lower rate of interest; 4) the fact that state holds shares in SOEs gives SOEs the advantage of captive equity insofar as state capital in SOEs is locked in. SOEs are not fully exposed to market takeover pressure as the transfer of state shares requires the prior approval of the state;[48] favorable dividend policy lowers dividend payout ratios and thus lowers the cost of capital of SOEs. To that end, SOEs can generate losses in a long period of time without the fear of going bankrupt, so they may engage in anti-competitive behavior, such as below-cost pricing; and 5) tax forgone in that taxes otherwise owed by SOEs are not collected by the government.[49]

Enterprises, eds., Richard R. Geddes (Hoover Institution Press, 2004); OECD Policy Roundtables on "Competition, State Aids and Subsidies," in the OECD Global Forum on Competition 2010, DAF/COMP/GF(2010)5, (May 19, 2011), 17.

[47] Capobianco, A. and H. Christiansen, "Competitive Neutrality and State-Owned Enterprises: Challenges and Policy Options", OECD Corporate Governance Working Papers, No. 1 (OECD Publishing, 2011), 5-7. http://dx.doi.org/10.1787/5kg9xfgjdhg6-en ; OECD, "State Owned Enterprises and the Principle of Competitive Neutrality," Policy Roundtables, DAF/COMP(2009)37, (OECD, 2009), 36-37.

[48] For instance, the transfer of shares of Chinese SOEs that will affect the state's control over the entity, needs approval from the SASAC or its local office, *see* the legal document, Measures for Supervision and Management of State Assets, Article 7, June 24, 2016. [Qiye Guoyou Zichan Jiaoyi Jiandu Guanli Banfa].

[49] For more information about grants of advantages granted to SOEs in detail, *see* Richard R. Geddes, "Case Studies of Anticompetitive SOE Behavior," in *Competing with the Government, Anticompetitive Behavior and Public Enterprises*, eds., Richard R. Geddes (Hoover Institution Press, 2004), 28-34.

(2) Monopolies and Exclusive Rights Advantages

SOEs may be given different kinds of monopoly and exclusive rights, such as production or exploitation permits, production quotas, distribution rights, export rights or import rights.[50] Commonly, the exclusive export or import rights are associated with state trading, which usually means that the state has control over trade with foreigners in terms of importation and exportation varying in the degree of government control (through ownership, control, licensing).[51] These rights are given to a limited number of SOEs, making these SOEs not fully exposed to market pressure by limiting market entry of POEs and FOEs. Monopolies and exclusive rights can also be given to SOEs by law or in fact. Even if there are no explicit laws prohibiting POEs/FOEs from entering a particular sector or market, the government may give SOEs monopolies through issuing permits only to SOEs in fact. Also, monopolies and exclusive rights provide SOEs with above-normal profits.[52]

(3) Regulatory and Other Advantages

The regulatory advantages that may favor SOEs include border measures, regulatory measures, and price control, such as i) import barriers, export taxes and other types of export restrictions; ii) deregulation of SOEs in the fields of labor, environment, product safety standards; exemption of SOEs from domestic anti-trust laws, bankruptcy laws, competition laws explicitly; iii) government may exert price control to give price supports to SOEs through policies that raise prices artificially.[53] Although the above situations may be found in law explicitly, some other situations may also give SOEs regulatory advantages where the law on its face doesn't distinguish between SOEs and POEs/FOEs, while in practice, there is selective enforcement of the above regulatory

[50] Geddes, *Ibid.*
[51] Edmond M. Ianni, "State Trading: Its Nature and International Treatment," 5 *Nw. J. Int'l L. & Bus.* 46, 4 (1983-1984).
[52] OECD, "State Owned Enterprises and the Principle of Competitive Neutrality," Policy Roundtables, DAF/COMP(2009)37, (OECD, 2009), 7-12, 35-37.
[53] "State-Owned Enterprises: Correcting A 21st Century Market Distortion," Coalition of Services Industries & U.S. Chamber of Commerce's Global Regulatory Cooperation Project (Feb. 22, 2011), 2-3. http://209.61.243.105/SOEpaperfinalfeb222011.pdf ; Capobianco, A. and H. Christiansen, "Competitive Neutrality and State-Owned Enterprises: Challenges and Policy Options", OECD Corporate Governance Working Papers, No. 1 (OECD Publishing, 2011), 6-7.

laws in favor of SOEs, such as forgone corrupt conduct by SOEs;[54] and iv) other advantages granted to SOEs may be in the form of information asymmetries between SOEs on one hand, and POEs and FOEs on the other hand; SOEs having more bargaining power from a psychological perspective; SOEs enjoying favorable regulatory environment; SOEs having the power of eminent domain, etc.[55] These "other" advantages will not be my focus because of the difficulty in quantification.

2.1.3 SOEs' International Activities

SOEs are expanding into global markets by trading in goods and services nowadays, rather than merely operating in domestic markets.[56] Trade activities of SOEs and their effects are significant in: i) the domestic market where SOEs are in competition with imported goods or cross-border services, ii) import markets where SOEs are exporting goods and services in competition with local business, and iii) third country markets. Countries with high SOEs shares in their economies are engaging in international trade actively.[57] The majority of large SOEs are active in international trade.[58] SOEs in emerging countries, particularly China, are more likely to engage in international trade than SOEs in OECD countries.[59] Previous research obtained data about SOEs shares of each country and trade shares of each country, and then calculated trade shares of SOEs, and the same approach is applied to estimate trade shares of SOEs in each sector by looking at SOEs shares and trade share of each sector, as shown in Table 7 and Table 8.[60]

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[54] Daniel Chow, "How China Promotes its State-Owned Enterprises at the Expense of Multinational Companies Doing Business in China and Other Countries," (Public Law and Legal Theory Working Paper Series, No. 307, Oct. 5, 2015), 2-7.

[55] The Postal Service in U.S. has the power of eminent domain. *See* Richard R. Geddes, "Case Studies of Anticompetitive SOE Behavior," in *Competing with the Government, Anticompetitive Behavior and Public Enterprises*, eds., Richard R. Geddes (Hoover Institution Press, 2004), 34.

[56] Max Büge, Matias Egeland, Przemyslaw Kowalski and Monika Sztajerowska, "State-owned Enterprises in the Global Economy: Reason for Concern?" VOX: CEPR's Policy Portal, May 2, 2013.

[57] Kowalski, P. et al., "State-Owned Enterprises: Trade Effects and Policy Implications", OECD Trade Policy Papers, No. 147 (OECD Publishing, 2013), 30-33.

[58] Kowalski, *Ibid*.

[59] Hejing Chen and John Whalley, "The State-owned Enterprises Issue in China's Prospective Trade Negotiations," *the Centre for International Governance Innovation*, CIGI Papers No. 48 (Oct. 2014), 12. https://www.cigionline.org/sites/default/files/no.48.pdf

[60] World Trade Organization, "International Trade Statistics 2015, Special Focus: World Trade and the WTO: 1995-2014." https://www.wto.org/english/res_e/statis_e/its2015_e/its2015_e.pdf ; Kowalski, P. et al., "State-Owned Enterprises: Trade Effects and Policy Implications", OECD Trade Policy Papers, No. 147 (OECD Publishing, 2013), 31.

Table 7 SOEs Shares of Each Country and Trade Shares of Each Country (2010)

	China	Eight countries with the highest SOE shares	SOEs among world's 2000 largest firms
World trade shares	10% of world merchandise exports	20 % of world trade	Estimate: 19% of the value of global exports of goods and services

Table 8 Sectors with SOEs Shares and Trade Share of Each Sector

Sector	Manufacture of motor vehicles, trailers and semi-trailers	Manufacture of metals + manufacture of electrical equipment, machinery and equipment	Mining support service activities; mining of coal and lignite; extraction of crude petroleum and natural gas; electricity, gas, steam and air conditioning supply	Civil engineering and architectural and technical testing and analysis	Land and pipeline transport and air transport	Financial service activities, except insurance and pension funding
SOEs shares	20%	35%	42%; 35%; 34%; 27%;	15%	53%	20%
Trade shares	12%	60%	Combined: 7.5% of the value of world exports	21% of world service trade	20% of world service trade	7% of world service trade

SOEs also make investments actively nowadays, such as green field investments and mergers and acquisitions, as compared to decades ago.[61] SOEs' investments can be found in the domestic market where SOEs are in competition with foreign investors, the foreign market where subsidiaries of SOEs are making investments in competition with local business and investors from third countries. State-backed firms accounted for a third of the emerging world's foreign direct investments in 2003-10.[62] However, trade volume and value of SOEs in the international market are more significant than establishing subsidiaries of SOEs in foreign market, as shown in Table

[61] Kathryn Gordon and David Gaukrodger, "Foreign Government-Controlled Investors and Host Country Investment Policies: OECD Perspectives" in *Sovereign Investment: Concerns and Policy Reactions*, eds., Karl P Sauvant, Lisa E. Sachs, and Wouter P.F. Schmit Jongbloed (New York: Oxford University Press, 2012), 496-498; United Nations Conference on Trade and Development (UNCTAD), *World investment Report 2014: Investing in the SDGs: An Action Plan*, UN Doc., UN Symbol: UNCTAD/WIR/2014, Sales No. E.14.II.D.1, (2014), 9. http://unctad.org/en/PublicationsLibrary/wir2014_en.pdf

[62]"The Rise of State Capitalism," Emerging-Market Multinationals, *The Economist*, Jan 21st, 2012.

9.[63] For instance, the data showed that although SOEs are active in domestic markets and SOEs are active traders in global markets, fewer foreign subsidiaries are established by SOEs than are formed by private companies.[64]

Table 9 Value of Estimated FDI by SOEs from 2007-2013

Year	2007	2008	2009	2010	2011	2012	2013
Share in global FDI outflows	9%	12%	16%	11%	10%	11%	12%

Source: UNCTAD FDI-TNC-GVC Information System, cross- border M&As database for M&As and information from the Financial Times Ltd, fDi Markets for greenfield projects.

Note: Estimated FDI is the sum of greenfield investments and M&As. [65]

The reason for my focus on international trade and trade related-investment, excluding merely investment, is that the international trade effects of SOEs are more significant than their investment effects. Also, the separation of legal regimes for trade on one hand, and the investment and financial areas on the other hand, has long existed.[66] Meanwhile, trade in agriculture will not be analyzed in my dissertation as trade in agricultural products practically accounts for only a small fraction of the value of world trade.[67] (Also, agricultural issues are covered by separate rules in the WTO). My focus will be on the trade effects of granting various advantages to SOEs in the international context in order to assess relevant rules in the WTO and put forward proposals to solve the problem.

[63] Nicola Bellini, "The Decline of State-Owned Enterprise and the New Foundations of the State-Industry Relationship," in *The Rise and Fall of State-Owned Enterprise in the Western World*, Pier Angelo Toninelli (Cambridge: Cambridge University Press, 2008), 42.

[64] Data sources comes from *Forbes Global 2000 and Orbis*. *See* Kowalski, P. et al., "State-Owned Enterprises: Trade Effects and Policy Implications", OECD Trade Policy Papers, No. 147 (OECD Publishing, 2013), 36. http://dx.doi.org/10.1787/5k4869ckqk7l-en

[65] United Nations Conference on Trade and Development (UNCTAD), *World investment Report 2014: Investing in the SDGs: An Action Plan*, UN Doc., UN Symbol: UNCTAD/WIR/2014, Sales No. E.14.II.D.1, (2014), 21, chapter 1. http://unctad.org/en/PublicationsLibrary/wir2014_en.pdf

[66] "International Trade Law and International Investment Law: Complexity and Coherence: Remarks by Mélida Hodgson," *Proceedings of the Annual Meeting, American Society of International Law,* 108 *American Society of International Law* (2014): 251-51.

[67] World exports of agricultural products accounted for a small portion in the world trade in 2015, *see* World Trade Organization, "International Trade Statistics 2015, Special Focus: World Trade and the WTO: 1995-2014." (2015), 1 (the chart). https://www.wto.org/english/res_e/statis_e/its2015_e/its2015_e.pdf

2.1.4 Concerns Arising from SOEs

Political concerns in relation to SOEs arise frequently. Literature also addresses economic warfare, which relates to economic attempts to enhance military and political positions.[68] Two dimensions can be observed. First, there is always suspicion about the political motives of granting advantages to SOEs.[69] For instance, by having state monopolies of oil production and exportation through SOEs, an oil exporting country is able to export less oil to a country that is politically unfriendly. State-trading nations may threaten to stop purchasing or selling unless some political concessions are made, while nations with private traders can seldom direct and shift trade readily.[70] Second, there is suspicion that SOEs that receive advantages may be used to pursue political objectives, rather than commercial objectives.[71] SOEs may follow a political agenda in exchange for obtaining advantages from their governments.

The economic concerns relating to SOEs merit more attention.[72] There is perception that the state capitalism is a threat to market capitalism in general.[73] SOEs usually receive advantages from the government solely based on government ownership or control, rather than based on their performance or efficiency.[74] There are two kinds of economic concerns. One is that giving

[68] "Economic warfare is defined as the conscious attempt to enhance the relative economic, military, and political position of a country through foreign economic relations." *See* Robert Loring Allen, *State Trading and Economic Warfare*, 24 *Law and Contemporary Problems* (Spring 1959): 256-275, 259. http://scholarship.law.duke.edu/lcp/vol24/iss2/3

[69] OECD Corporate Affairs Division, Directorate for Financial and Enterprise Affairs, "SOEs Operating Abroad: An Application of the OECD Guidelines on Corporate Governance of State-Owned Enterprises to the Cross-border Operations of SOEs" (Paris: OECD), para. 6.
https://www.oecd.org/daf/ca/corporategovernanceofstate-ownedenterprises/44215438.pdf

[70] Robert Loring Allen, "State Trading and Economic Warfare," 24 *Law and Contemporary Problems* (Spring 1959)*:* 256-275, 263-264.

[71] There are three forms of political advantages obtained from economic warfare: respectability and status; alliances or support of other countries; and takeover of another country. *See* Robert Loring Allen, *State Trading and Economic Warfare*, 24 *Law and Contemporary Problems* (Spring 1959): 256-275, 262.

[72] Economic warfare generally falls into five categories: (1) guaranteeing sources of supply, (2) guaranteeing markets, (3) improving the terms of trade, (4) denial of respectability and status, and (5) economic takeover. *See* Robert Loring Allen, *State Trading and Economic Warfare*, 24 *Law and Contemporary Problems* (Spring 1959): 256-275, 261.
For information about the impact of SOEs in trade, *see* Madanmohan Ghosh and John Whalley, "State-owned Enterprises, Shirking and Trade Liberalization" (NBER Working Paper Series, Working Paper 7696. May 2000) http://www.nber.org/papers/w7696

[73] Abdul Ghafoor Awan, "State Versus Free Market Capitalism: A Comparative Analysis," 6(1) *Journal of Economics and Sustainable Development* (2015): 171.

[74] Capobianco, A. and H. Christiansen, "Competitive Neutrality and State-Owned Enterprises: Challenges and Policy Options", OECD Corporate Governance Working Papers, No. 1 (OECD Publishing, 2011), 3.

advantages per se constitutes a concern, and the other is that the behavior of SOEs to the extent that they receive advantages constitutes a concern.[75] The first kind of economic concern relates to distortion of global markets, negatively affecting other countries, unfair competition, contamination of a level playing field and so on. The second kind of economic concern relates to the SOEs' anti-competitive activities like low pricing, avoiding restrictions on below-cost pricing, cross-subsidization, which includes advantages received at home leading to "unfair" advantages abroad, or monopolistic advantages in one business leading to advantages in a non-monopolistic (competitive) sector.[76] SOEs are more likely to engage in the above anti-competitive behavior after they receive advantages. This is because the success of the manager of an SOE is measured more by the scale and scope of the SOE's operations than by the profit. The SOEs' operational scale and scope of their activities are more likely to be expanded following anti-competitive behavior. Receiving more advantages can provide opportunity and resources for SOEs to engage in anti-competitive behavior. Hence, lacking the pressure of takeover threats from capital markets, SOEs are more likely to engage in anti-competitive behavior after receiving advantages.[77] (The economic concern is also associated with the size of trading partner, and this concern will be addressed in Chapter Two relating to China, which is a large trader.)[78]

The reason that I focus on the economic concerns rather than the political concerns is that, first, politics are beyond technical legal analysis. Second, it is hard to demonstrate or find out the political goals involved in giving advantages to SOEs. Third, the purpose of international trade law is to address international trade issues, rather than addressing political issues. In particular, the WTO ought not try to be a forum for solving political matters.[79]

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[75] Sara Sultan Balbuena, *Concerns Related to the Internationalisation of State-Owned Enterprises: Perspective from Regulators, Government Owners and the Broader Business Community*, OECD Corporate Governance Working Paper No.19, (Paris: OECD Publishing, Apr. 6, 2016), 23-38.

[76] *See* Robert Loring Allen, "State Trading and Economic Warfare," 24 *Law and Contemporary Problems* (Spring 1959): 256-275, 263-5; Kenneth C. Baseman, "Open Entry Costs and Cross-Subsidization in Regulated Markets," in: Gary Fromm eds., *Studies in Public Regulation* (Cambridge MA: MIT Press, 1981), 329-370; Timothy J. Brennan, "Cross-Subsidization and Cost Misallocation by Regulated Monopolies," 2(1) *Journal of Regulatory Economics*, (March 1990): 37-51.

[77] David E. M. Sappington and J. Gregory Sidak, "Anticompetitive Behavior by State-Owned Enterprises: Incentives and Capabilities," in *Competing with the Government, Anticompetitive Behavior and Public Enterprises*, eds., Richard R. Geddes (Hoover Institution Press, 2004), 7-14.

[78] A nation may use its the large-trader position and that of the debtor. *See* Robert Loring Allen, "State Trading and Economic Warfare," 24 *Law and Contemporary Problems* (Spring 1959): 256-275, 263,

[79] For example, GATT Article XXI's security exception is rarely invoked by the WTO Members out of the recognition that political issues should be solved elsewhere.

2.1.5 Summary of Section 2.1

This section described the problem to be examined and my specific focuses in this dissertation. This section defined the scope of the dissertation to focus on the SOEs that have operation of producing goods or services, and that are controlled by governments. This section examined the global presence of SOEs by looking at different data sources and information,[80] and found that the presence of SOEs in the global economy is still significant, particularly in the emerging countries. These SOEs usually receive various kinds of advantages, such as financial advantages, monopolies and exclusive rights advantages, regulatory advantages, etc. The dissertation only focuses on financial advantages, monopolies and exclusive rights advantages, and regulatory advantages granted to SOEs. International activities of SOEs are intensive in terms of trade and investment. This dissertation will only focus on the aspects of trade and trade-related investment, excluding merely investment by SOEs. Specifically, it is related to the following situations, where SOEs are in competition with imports in the domestic market, where SOEs are in competition with foreign investment in the domestic market, where SOEs export to foreign markets, and SOEs make trade-related investment in foreign markets. A variety of concerns arise in those situations above when SOEs receive advantages. This dissertation will only address economic concerns, rather than political concerns.

2.2 The History of SOEs in the World Economy

In this Section I examine the issue of having SOEs and giving them advantages in a larger context, which is the relationship between governments and commercial enterprises. Three potential factors may explain why states establish SOEs and give advantages to them. The first factor is the wish to achieve domestic social and economic objectives through the tool of SOEs; the second factor is

[80] From the data in previous literature, several minor issues merit attention. First, different institutions and studies use different definitions of SOEs as their basis for calculating the weight of SOEs in the global economy. Second, when there is no direct data about a particular item, for instance, the SOEs' share of trade, several sub-data sets could be used to calculate approximate figures. Third, no general data and statistics exist for the totality of advantages granted to SOEs, except for data about subsidies in a particular sector, such as subsidies given to the automobile, steel industry, agriculture, fishing, etc., or data about a particular type of advantage, such as energy subsidies, export subsidies, environmental subsidies, and R&D subsidies. Unsystematic information and examples about the financial advantage granted to a specific SOE can be found.

the underlying political philosophy of some governments, especially those adhering to Marxist theory, that governments should have the predominant or exclusive role in society or in some industries; and the last factor is a desire to compete more efficiently in the global market. The second factor has nowadays largely transformed into either the first or third factor due to the collapse of Communism and the growth of market-oriented economic reforms; the last factor works in two opposing ways. On the one hand, state presence may be designed for expanding regional and global markets, and on the other hand, the state presence may be used to protect domestic industries in the domestic market from competition of foreign competitors. Historically, the phenomenon of having SOEs and giving advantages to SOEs has changed from having been perceived as non-problematic in times of an insular world, i.e., little commercial trade among nations, to problematic in times of globalization and interdependence among nations.[81]

In this section, I will first examine the establishment of SOEs and grants of monopolies and regulatory advantages to enterprises before the 19th century, and the reasons for the phenomenon not being perceived as problematic. Then I will examine in the recent history, the extent of presence of SOEs and their receipt of advantages, and the reasons why the phenomenon gradually became problematic. Thus, reactions, such as privatization took place. Finally, I will examine regulations that may solve the problems of SOEs and their receiving advantages, respectively in the early GATT, in the integration of the European Community, and in the recent TPP negotiations and other FTAs negotiations.

2.2.1 Expanding Foreign Markets Before the 19th Century

(1) A Broader Context of Granting Monopolies and Regulatory Advantages to Enterprises

Beginning from the 16th century with the discovery of the New World, in order to explore the Southern Atlantic and Indian Oceans, the UK, the Netherlands and other traditional European

[81] An insular world means that there is little commercial trade among nations, and nations are less interdependent. A world of interdependence means that "various economies in the world relate to one another to an increasing extent in such a way that economic forces, or conditions that develop in one economy are transmitted rapidly to others." *See* John H. Jackson, *Restructuring the GATT System* (New York: Council on Foreign Relations Press, 1990), 83; John H. Jackson, *Sovereignty, the WTO and Changing Fundamentals of International Law* (Cambridge University Press, 2006), 8-11.

nations chartered several companies.[82] Although the governments owned no shares or owned partial shares, they had indirect control of the chartered companies or at least had some connections with the chartered companies.[83] Governments gave these companies monopolies in respect of carrying on a particular trade with a foreign nation or in a foreign market, and the regulatory authority to control that trade in foreign markets, in order to assist them in competition with foreign companies.[84] Most of these enterprises ceased to exist at the expiration of their durations, for instance, a period of a single voyage.[85] Of those enterprises continuing to exist, the privileges and monopolies granted to them by the government were withdrawn, and most of them went bankrupt after losing those monopolies.[86] Examples can be found in the Royal African Company, which was granted a monopoly over English trade with West Africa in 1660.[87] The English India Company was chartered by British in 1600 and was granted a monopoly and privileges over the Asian trade and India trade,[88] and was granted regulatory power and acquired the civil rights of administration in 1764.[89] The French East India Company was funded as the joint stock corporation in 1619 with the King funding one fifth of investment of the company. It was granted a 50-year monopoly over French trade in the Indian and Pacific Oceans.[90]

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[82] Crane Brinton, John B. Christopher & Robert Lee Wolff, *A History of Civilization*, 3rd edition, Volume 1 (Englewood Cliffs, N.J.: Prentice-Hall, 1967), 550-54; Samuel Williston, "The History of the Law of Business Corporations before 1800," 2(3) *Harvard Law Review* (Oct 15, 1888): 105-124, 109; Before 15th century, it was more about the expansion of territory. Colonization began after the Great Discoveries overseas in 1492, and colonialism was operated as a joint public-private venture by England, France, Netherland. *See* Marc Ferro, *Colonization: A Global History* (London: Routledge, 2005), 3.

[83] Venkatesh Rao, "A Brief History of the Corporation: 1600 to 2100," *Ribbon Farm: Experiments in Refactored Perception*, June 8, 2011, http://www.ribbonfarm.com/2011/06/08/a-brief-history-of-the-corporation-1600-to-2100/

[84] Samuel Williston, "The History of the Law of Business Corporations before 1800," 2 (3) *Harvard Law Review* (Oct 15, 1888): 105-124, 114.

[85] Venkatesh Rao, *ibid*.

[86] Samuel Williston, "The History of the Law of Business Corporations before 1800," 2 (3) *Harvard Law Review* (Oct 15, 1888): 105-124, 111.

[87] Crane Brinton, John B. Christopher and Robert Lee Wolff, *A History of Civilization*, 3rd edition, Volume 1 (Englewood Cliffs, N.J.: Prentice-Hall, 1967), 562-64.

[88] Fernand Braudel, *Civilization and Capitalism: 15th -18th Century*, Volume II, The Wheels of Commerce, Translation from the French by Siân Reynolds, (New York: Harper & Row, 1982-1984), 449-50.

[89] The Government of India Act 1858, formally dissolved the company, ruling powers over India transferring to the British Crown, *see* "India Rebellion of 1857," New World Encyclopedia, http://www.newworldencyclopedia.org/entry/Indian_Rebellion_of_1857

[90] Fernand Braudel, *Civilization and Capitalism: 15th -18th Century*, Volume II, The Wheels of Commerce, Translation from the French by Siân Reynolds, (New York: Harper & Row, 1982-1984), 446, 455.

(2) Reasons for Not Being Perceived as Problematic

Grants of the above advantages (monopoly or exclusive rights over trade, resources mining, land, ports, and regulatory power) were not perceived as a problem before the 19th century. First, this is probably due to the fact that governments were still at the early stages of exploring foreign markets, and the competition was more among states than competition among companies. Nations competed with one another by all available tools, such as the model of chartering companies partly equipped with sovereign rights.[91] The exploration of these new markets and foreign natural resources required a large enterprise with privileges from governments. In addition, granting monopoly power is particularly important in expanding markets in foreign nations since it can guarantee no competition from companies of its own nationality, and hence it can generate increased profits to make large investments.[92] In a nutshell, western countries used the strong ties between the government and such enterprises to expand foreign markets.

Second, the trade between the mother countries and the colonies was on a very small scale with small trade volume and trade value during the colonial expansion of the 16th and 17th centuries, much different from the situation since the Industrial Revolution.[93] The commodities being traded were largely primary products. The Spanish obtained gold and silver from mines in Africa and Latin America, and the Portuguese obtained huge markups as trade intermediaries. Later, European powers, primarily the English, French and the Dutch, traded silk, foods, spice, pepper, cotton, coffee and tea from Asia, copper and slaves from Africa, precious metals from Americas, and afterwards they traded furs from Canada, tobacco and cotton from Virginia and sugar from Caribbean and Brazil.[94]

Third, a large percentage of these companies went out of such businesses, or ceased to exist due to bankruptcy, liquidation, or handing control over the colonies to their mother countries, or

[91] Benedikt Stuchtey,"Colonialism and Imperialism, 1450–1950," in: *European History Online (EGO)*, (Mainz, Germany: the Institute of European History, Jan. 24, 2011), 11. http://www.ieg-ego.eu/stuchteyb-2010-en.
[92] Marc Ferro, *Colonization: A Global History* (London: Routledge, 2005), 54.
[93] *Id*., at 16.
[94] Benedikt Stuchtey,"Colonialism and Imperialism, 1450–1950," in: *European History Online (EGO)*, (Mainz, Germany: the Institute of European History, Jan. 24, 2011), 10-11. Other countries following the model of British, Netherland, and France, are Sweden, Denmark, Scotland, Austria, Brandenburg-Prussia and Poland. *See* Fernand Braudel, *A History of Civilizations*, translated by Richard Mayne (New York: Penguin Books, 1995).

handing control to local governments after the independence of colonies. Last, non-competitive markets were the norm at that time since it was before the idea of free markets developed.[95]

In a nutshell, in order to explore foreign markets before the 19th century, European countries largely gave companies monopolies to carry out trade in foreign markets or trade with foreign nations. This was not perceived as problematic due to the fact that nations engaged in competition in expanding foreign markets, the limited amount of trade, and disappearance of these enterprises that had been granted monopolies or regulatory advantages.

2.2.2 Perceived as a Problem due to Interdependence and Globalization Since the Industrial Revolution

This section will first, describe the different extent of state involvement in trade through the forms of SOEs and STEs, (including through grants of monopolies and exclusive rights, and grants of financial and regulatory advantages), in different countries---OECD countries, developing countries and communist countries---with different purposes respectively. Second, this section will explain why the existence of SOEs and grants of various advantages have been perceived as problematic in light of three factors. Last, it will examine reactions to the perceived problem by looking at the privatization waves, and the decline in state trading and grant of advantages.

(1) Different Extent of SOEs and the Grants of Advantages to Them

a. Capitalist (OECD) Countries: State trading, Nationalization, Grants of Advantages

Beginning in the late 19th century,[96] and throughout the 20th century, particularly after WWI, many OECD countries established STEs with monopoly or exclusive rights in exportation, importation and distribution to promote exportation and control importation, and the involvement in

[95] The theory of free market had not developed until 1776 when Adam Smith wrote the book *An Inquiry into the Nature and Causes of the Wealth of Nations*.

[96] Particularly since the Second Industrial Revolution, which is generally dated between 1870 and 1914 up to the start of World War. *See* Ryan Engelman, "The Second Industrial Revolution: 1870-1914," *U.S. History Scene*, http://ushistoryscene.com/article/second-industrial-revolution/

international trade of STEs was prevalent.[97] Canada, New Zealand, Australia, European nations, Argentina, Japan and other countries established STEs, which were wholly owned by the state or given monopoly privileges by the state, especially in the agriculture sector, such as the right to export sugar and butter, trade grain, and import alcoholic beverages, tobacco and silk.[98] Most STEs, the majority of which were SOEs, had significant roles as exporters in the agricultural sector in the 1990s.[99] Two of the major exporting STEs, the Canadian Wheat Board and the Australian Wheat Board, accounted for more than 30 percent of world wheat exports from 1992-1995.[100]

A nationalization wave widely occurred and spread in 1960s, 70s and 80s in the UK and continental Europe for the purpose of controlling production and supply and gaining economies of large scale.[101] For instance, during the post-war period, most of the UK's major strategic heavy

[97] John N. Hazard, "State Trading in History and Theory," 24 *Law and Contemporary Problems* (Spring 1959): 243-255, 244; M. M. Kostecki, "State Trading in Industrialized and Developing Countries," 12(3) *Journal of World Trade Law* (May/June 1978): 201; M. M. Kostecki, "State Trading in Agricultural Products by the Advanced Countries," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 22-54 (UK: Palgrave Macmillan, 1982), 27.

[98] Julian M. Alston and Richard Gray, "State Trading versus Export Subsidies: The Case of Canadian Wheat," Journal of Agricultural and Resource Economics 25(1):51-67 (July 2000): 65-6; M. M. Kostecki, "State Trading by the Advanced and Developing Countries: The Background," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 6-21 (UK: Palgrave Macmillan, 1982). For instance, crown corporations in Canada accounted for 15.7 percent of corporate assets and 11 percent of GNP in Canada at the end of 20th century, such as The Canadian Wheat Board, which had export monopoly. *See* D. Wayne Taylor, *Business and Government Relations: Partners in the 1990s* (Gage Educational Publishing Company, 1991), 97. The Canadian provincial liquor boards had monopolies on the importation, distribution, and sale of alcoholic beverages. *See* Nuri T. Jazairi, "The Impact of Privatizing the Liquor Control Board of Ontario (1994)", Report prepared for the Ontario Liquor Boards Employees' Union, (1994), 1-14; The Australian Wheat Board created in the late 1930s, had control over the exportation of wheat. The New Zealand Dairy Board had the control of exporting almost all New Zealand dairy products since 1923. *See* "International Agriculture and Trade Reports: Agriculture in the WTO," Economic Research Service/USDA, WRS-98-4/December 1998, 45; Japan Food Agency had import monopolies on wheat, rice and barley. *See* International Agriculture and Trade Reports: Agriculture in the WTO, Economic Research Service/USDA, WRS-98-4/December 1998, 46; Livestock Products Marketing Organization, an SOE in South Korea, purchased 90% of Korea's beef imports in 1993. *See Ibid*. The Federal Wheat Administration in Switzerland purchased domestic wheat and had an import monopoly for bread flour in the 1970s. *See* Special distribution by "Agriculture" sub-group on grains in multilateral trade negotiations, document on international trade in grains, addendum, Switzerland, MTN/GR/W/8/Rev.1/Add.7, Jan. 26, 1976.

[99] K. Ackerman, P. Dixit, and M. Simone, "*State Trading Enterprises: Their Role in World Markets*," in U.S. Department of Agriculture, Economic Research Service, Agricultural Outlook (June 1997), 11-12. (its Table 1. STE Agricultural Exporters Dominate in the WTO List)

[100] *Id*., at 11. The chief dairy export STE, the New Zealand Dairy Board, handled about 30 percent of world dairy product exports in 1999. *See* Karen Z. Ackerman and Praveen M. Dixit, "An Introduction to State Trading in Agriculture," Market and Trade Economics Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 783. (October 1999), 6.

[101] Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 4; France in the post-war period expanded the nationalized sectors, such as tobacco sales, postal, national rail and telecommunications services, and nationalized most banks and automobile manufacturers in 1945, a mining company, an electricity company and a gas company in 1946. *See* David H. Pinkney, "Nationalization of Key Industries and

industries and public utilities were nationalized, such as the Bank of England, the coal industry, central electricity generating, the railways and transport, the steel industry, and local gas supply.[102] Nationalization occasionally occurred in other OECD countries.[103] Various advantages were granted in order to promote exportation, such as those provided to the softwood lumber industry, steel industry, cultural industry, and fishing industry in Canada.[104] Particularly since 1970s, non-trade barriers increased, and can be found in export subsidies in the U.S to the agriculture sector, and in the low cost of capital in Japan to key industries, like electric power, shipping, coal, steel, automobile, television sets, computer memory chips, aircraft, and most other high-tech industries in the late 20th century.[105]

b. Developing Countries: STEs, Nationalization, Grants of Advantages, Import Substitution

After independence, out of the need for domestic social and economic development, countries in Latin American and Africa established STEs and SOEs and gave advantages to them. Their purposes included operating natural monopolies by states, building the national defense industry, solving social issues such as unemployment, increasing governmental revenue from monopolistic

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Credit in France After the Liberation". *Political Science Quarterly* 62 (3), 368–80, (1947), 368; Charles Hauss, *Comparative Politics: Domestic Responses to Global Challenges*, 5th edition (Belmont, CA: West/Wadsworth, 2006), 132; Spain nationalized its railways in 1941 and the Spanish Rumasa in 1983, a company with business from banks to hotels. *See* "History of Nationalization," World Encyclopedia of Law (Apr. 2013). http://lawin.org/

[102] "Nationalization," *Economics Online*, News Analysis Theory Comment, http://www.economicsonline.co.uk/Business_economics/Nationalisation.html (last visited Sep. 2016.); "History of Nationalization," lawin.org. 04, 2013. Accessed 03 2016. http://lawin.org/

[103] Canada had large public ownership in its cultural industry beginning in 1920s. Canada nationalized Canadian National Railways in 1918, and fully nationalized electricity in early 1960s in Quebec, and 16 of Canada's top 500 industrial companies were wholly owned by provinces. *See* Robert O' Brien, *Subsidy Regulation and State Transformation in North America, the GATT and the EU* (Basingstoke, Hampshire, England: Macmillan Press, 1997), 56.

[104] Robert O' Brien, *Subsidy Regulation and State Transformation in North America, the GATT and the EU* (Basingstoke, Hampshire, England: Macmillan Press, 1997), 67-95. Other examples can be found that Europe had SOEs that receive periodic infusions of new "equity" capital and the steel, textile industries got support from their governments to consolidate operations. *See* Alan Mathews, "End the Use of Export Subsidies in the 2013 CAP Review," CAP Reform EU, April 5, 2012, http://capreform.eu/end-the-use-of-export-subsidies-in-the-2013-cap-review/

[105] Office of the United States Trade Representative, "Real Results: Leveling the Playing Field for American Workers and Farmers," *Archive*, July 08, 2004. https://ustr.gov/archive/Document_Library/Fact_Sheets/2004/Real_Results_Leveling_the_Playing_Field_for_American_Workers_Farmers.html ; United States Department of Agriculture, "Farm and Foreign Agricultural Services" in *USDA FY 2006 Budget Summary and Annual Performance Plan*, 2006. http://www.usda.gov/documents/FY06budsum.pdf ; Robert O' Brien, *Subsidy Regulation and State Transformation in North America, the GATT and the EU* (Basingstoke, Hampshire, England: Macmillan Press, 1997), 126-40. Dominick Salvatore (edited), *Protectionism and World Welfare* (Cambridge England: Cambridge University Press, 1993), 1, 136-40.

SOEs that could make large profits from their monopolistic status.[106] Developing countries in Latin America, Africa and Asia used STEs as the single channel for importation of some products.[107] Taking the mineral markets as an example, state trading was prominent in developing countries in copper, tin, bauxite, and iron ore, following the nationalization of mineral firms.[108] As of 1976, state trading in copper comprised 39 percent of global production, and two of the four largest firms were SOEs in Zaire and Zambia.[109] Nationalization occurred in Latin America starting in the 1940s.[110] Argentina nationalized Central Bank of Argentina, natural gas, telephone network, radio networks, railways, petroleum, Buenos Aires Metro and electric utilities in 1940s and 1950s, re-nationalized postal service, water utility, pension funds, airline, gas and petroleum in the 21st century.[111] In the 1970s, OPEC countries took control of their domestic petroleum industries, and nationalization occurred on a large scale.[112]

The grants of advantages and establishment of SOEs were also instruments of the import substitution policy in Latin America and other developing countries, such as India and Pakistan.[113] The import substitution policy, which refers to the establishment of domestic production facilities to manufacture goods that were formerly imported, began in the post-World War II era, reached its height particularly in 1950s and 1960s and lasted until 1980s.[114] In the beginning of 20th century, Latin America exported mainly primary products and imported industrial products. Hence, in order

[106] "History of Nationalization," lawin.org. 04, 2013. Accessed 03 2016. http://lawin.org/
[107] United Nations Conference on Trade and Development, *Handbook of Trade Control Measures of Developing Countries 1987*, prepared by the Trade Information System (TIS) of UNCTAD with the support of the United Nations Development Programme, UNCTAD, (New York: United Nations, 1987). Doc symbol: TD/UNCTAD/ST/ECDC/33.
[108] Walter C. Labys, "The Role of State Trading in Mineral Commodity Markets," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 78-101 (UK: Palgrave Macmillan, 1982).
[109] *Id*., at 81-4. The State Trading Corporation of India was established and owned by the Government of India in 1956 for the importation of essential goods into India, including edible oils, sugar, wheat, and hydrocarbons, and exportation of agricultural commodities and manufactured products. *See* M. M. Kostecki, "State Trading by the Advanced and Developing Countries: The Background," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 6-21 (UK: Palgrave Macmillan, 1982), 10; "State Trading Corporation of India, LTD.," *NTI Building A Safer World*, http://www.nti.org/learn/facilities/273/
[110] Amy L. Chua, "The Privatization-Nationalization Cycle: The Link Between Markets and Ethnicity in Developing Countries," 95(2) *Columbia Law Review* (March 1995): 223, 224-25.
[111] "History of Nationalization" lawin.org. 04, 2013. Accessed 03 2016. http://lawin.org/
[112] OPEC Brief History, http://www.opec.org/opec_web/en/about_us/24.htm; Øystein Noreng, "State Trading and the Politics of Oil," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 103-116 (UK: Palgrave Macmillan, 1982), 103-15.
[113] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 346-347.
[114] Werner Baer, "Import Substitution and Industrialization in Latin America: Experiences and Interpretations," 7(1) Latin American Research Review (Spring, 1972): 95-122, 95.

to have self-sufficiency, economic independence and industrialization, they used import substitution as a policy tool, through various means such as tariffs, import quotas, subsidized government loans from state owned banks, and nationalization in heavy industries such as the steel industry.[115]

c. Communist Countries: Nationalization of all Industries and State Trading

In communist countries, the prevailing political philosophy held that the state should play a predominant or exclusive role in society or certain sectors of the economy. They viewed public ownership as a political end. [116] Accordingly, the Soviet Union, Eastern European countries, China and Vietnam heavily used SOEs, STEs and policies relating to export promotion. During the World Wars and the post-war periods, the emergence of state economies and waves of nationalizations in communist countries, led to centrally planned economies, such as Soviet Union.[117]In COMECON countries,[118] the state controlled all foreign trade through STEs, and most COMECON members imported oil and natural gas from the Soviet Union in exchange for industrial and farm products.[119] Indeed, the notion of "giving advantages to enterprises from the government" doesn't exist in a centrally planned economy since all assets are owned by the state.

After the collapse of communist countries, state trading and grants of advantages to SOEs were still pervasive. In 1992-1993, up to 70 percent of exports outside the former Soviet Union were

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[115] *Ibid*.

[116] "Nationalization," *International Encyclopedia of the Social Sciences 1968*, *Encyclopedia.com.* (20 Mar. 2016). http://www.encyclopedia.com/doc/1G2-3045000860.html

[117] Fernand Braudel, *A History of Civilizations*, translated by Richard Mayne (New York: Penguin Books, 1995), 547-73; "Nationalization after WW2, Property Restitution in Poland," *Information Website*, http://propertyrestitution.pl/Nationalization,after,WW2,18.html ; Poland, following 1946, nationalized all enterprises with over 50 employees. Cuba, after Castro revolution in 1959, nationalized all remaining privately owned business entities in Cuba in 1966-68. *See* "History of Nationalization," lawin.org. 04, 2013. Accessed 03 2016. http://lawin.org/ ; Most enterprises in East Germany were nationalized following the World War II. *See* Glenn E. Curtis, ed. *Post-War East Germany, Excerpted from East Germany: A Country Study*, (Washington, D.C.: Federal Research Division of the Library of Congress, 1992). http://www.shsu.edu/~his_ncp/EGermPW.html ; Burton W. Folsom, ed., *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 4.

[118] The Council for Mutual Economic Assistance was an economic organization from 1949 to 1991 under the leadership of the Soviet Union that comprised the countries of the Eastern Bloc with a number of communist states. *See* "COMECON," *Encyclopedia Britannica*, https://www.britannica.com/topic/Comecon

[119] Walter C. Labys, "The Role of State Trading in Mineral Commodity Markets," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 78-101 (UK: Palgrave Macmillan, 1982), 79.

controlled by STEs.[120] Although the countries in Eastern Europe made a transition towards market-oriented economies, these former Soviet Union allies had SOEs and gave advantages to SOEs widely during the economic transition period.[121] The main privileges granted to these STEs were exemption from export taxes, priority access to oil export pipelines, preferential provision of export quotas and licenses, etc. Some of these privileges were abolished after 1995 while some privileges remain, such as the exclusive right to sell Russia's raw natural diamonds remains in the Company named Diamonds of Russia-Sakha, and the monopolies for the exportation of natural gas and oil pipelines remain in Gazprom and Transneft companies, all of which are SOEs.[122]

(2) Why did SOEs and Grants of Advantages Become Problematic?

Three factors can explain why the existence of SOEs and grants of advantages became problematic over time. One factor is increased international trade, one factor is related to efficiency from an internal performance perspective, and another factor is the ideas and values about the role that government should play in the economy.

a. Increased International Trade

International trade became more common during the Industrial Revolution. The Industrial Revolution beginning in 1764, led to the creation of factories with power-driven machines that replaced hand manual production.[123] This led to specialization and mass production in industries,

[120] Vladimir Drebentsov and Constantine Michalopoulos, "State Trading in Russia," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 303-318 (University of Michigan Press, 1998), 308.

[121] James Roaf, Ruben Atoyan, Bikas Joshi, Krzysztof Krogulski, and etc., "25 Years of Transition Post-Communist Europe and the IMF," International Monetary Fund, Regional Economic Issues Special Report (2014); "Transition to a Market Economy in Eastern Europe: Project Site: Hungary and Poland," http://www.jica.go.jp/english/our_work/evaluation/reports/2002/pdf/2002_0111.pdf

[122] In addition, the Russian government has a series of agreements with the Commonwealth of Independent States members and several former COMECON countries (Cuba and Mongolia). These agreements envisaged mutual shipments of specified goods, with prices usually different from market prices. In Russia the company Roscontract (an SOE established in 1992) was the main beneficiary of such agreements. It received a loan from the federal budget for the interstate transactions, and the repayment to date is unknown. *See* Vladimir Drebentsov and Constantine Michalopoulos, "State Trading in Russia," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 303-318 (University of Michigan Press, 1998), 310.

[123] Fernand Braudel, *A History of Civilizations*, translated by Richard Mayne (New York: Penguin Books, 1995), 373-98.

such as clothes, textiles, steel and iron.[124] Mass manufactures needed raw materials at lower costs for mass production of industrial products, and competed for markets in which to sell their products. As for inputs, the need to import raw materials at low prices arose for manufacturers, who found prices of inputs in the domestic market were artificially high due to protectionist tariffs.[125] As for outputs, mass production of goods at cheap prices satisfied the needs of domestic consumption. Surplus, however, occurred due to the large capacity of the production facilities.[126] Hence, to sell the goods, the need to expand foreign markets arose. In addition to that, maritime transportation with the help of steam-powered ships, telegraphs, telephones, railroads, and other technologies, became faster and cheaper, making it easier for importation and exportation.[127] The 2nd Industrial Revolution amplified it.[128] Therefore, international trade of many goods beyond raw materials, gold and minerals, inevitably became more common.

The growth of trade was reinforced by mercantilistic practices, which promoted exportation through means such as giving financial advantages, monopolies, and other privileges to companies. Mercantilistic practices reached their height in the Europe of the seventeenth and eighteenth centuries.[129] Nations dominated by the idea of mercantilism valued gold or money as representing the wealth of a nation.[130] Hence, by discouraging imports, they could save the nation's wealth, and the imposition of high tariffs could also raise tax revenue for the state. By the promotion of exports,

[124] E.g., British textile industry. *See* Marc Ferro, Colonization: A Global History (London: Routledge, 2005), 17.
[125] For instance, In the first half of the 19th century in England, protectionist tariffs shielded British farmers from competition by keeping the domestic price of food artificially high. *See* John Chodes, "Richard Cobden: Creator of the Free Market," in Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 35.
[126] Ludwig von Mises, Facts About the "Industrial Revolution", in Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 55.
[127] Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 1.
[128] The Second Industrial Revolution is generally dated between 1870 and 1914 up to the start of World War. *See* Ryan Engelman, The Second Industrial Revolution: 1870-1914, U.S. History Scene, available at http://ushistoryscene.com/article/second-industrial-revolution/
[129] Murray N. Rothbard, "Mercantilisim: A Lesson for Our Times?" In Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 7.
[130] Mercantilists measure the wealth of a nation by the possession of metals, while in contrast, today, nations value resources (human, man-made, natural resources) available for producing goods and services. During the period 1815-1914, almost every Western has been mercantilist. *See* Andrzej Cirślik, International Trade: Theory and Policy, Lecture 1, slide 37, http://slideplayer.com/slide/8724296/ ; Thomas Munn, *England's Treasure by Foreign Trade,* (reprented, Oxford: Basil Blackwell, 1928); Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 27-28.

they could obtain gold/money.[131] In terms of promotion of exportation, subsidies, privileges and monopolies were given to companies favored by the state.[132] Particularly strong producers could persuade the government to facilitate importation of raw materials for their inputs, to restrict importation of finished goods, and to promote the exportation of their finished goods.[133]

Increased international trade can partially contribute to the explanation that why the existence of SOEs and grants of advantages became problematic. Trade increased among developed countries, and developing countries were also becoming more involved in international trade. The promotion of exports through the existence of SOEs and STEs, and the grants of advantages, affected trading partners and led to international tensions and trade wars. Hence, the existence of SOEs and grants of advantages became problematic for international trade.[134] Nations that had undergone privatization worried about unfair competition from foreign SOEs. Large multinational corporations, for example, in 1970s, negatively affected by SOEs or STEs or grants of advantages in international trade, advocated for privatization and reduced trade barriers. Political and economic concerns arose when these SOEs from communist countries expanded into global markets. The Soviet Union had some trade with the European countries, such as exportation from the Soviet Union of oil and national gas to Western countries.[135] Economic concern arose when these SOEs dumped goods in other countries at lower prices. For instance, the Soviet Union sold lumber or coal at dumping prices in foreign markets.[136] Political and military concerns arose from economic issues when, for instance, after WWII and in the period of Cold War, the Soviet Union used state trading for political purposes.[137]

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[131] Murray N. Rothbard, "Mercantilisim: A Lesson for Our Times?" In Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 7.
[132] *Id*., at 7 and 10.
[133] Nick Elliott, "John Bright: Voice of Victorian Liberalism," in Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 28.
[134] John Chodes, "Richard Cobden: Creator of the Free Market," in Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 35.
[135] "Soviet Union: Trade with Western Industrialized Countries," May 1989, http://www.country-data.com/cgi-bin/query/r-12794.html
[136] John N. Hazard, "State Trading in History and Theory," 24 *Law and Contemporary Problems* (Spring 1959): 243-255, 246.
[137] Robert Loring Allen, "State Trading and Economic Warfare," 24 *Law and Contemporary Problems* (Spring 1959): 256-275, 267-72. http://scholarship.law.duke.edu/lcp/vol24/iss2/3 ; for an account of Soviet policy, *see* Joseph S. Berliner, *Soviet Economic Aid: The New Aid and Trade Policy in Undeveloped Countries* (Council on Foreign Relations, 1958).

b. Inefficient Performance of SOEs and the Government Bonds Markets

One other reason that can explain why SOEs and grants of advantages became problematic is related to the efficiency issue from an internal perspective.[138] Due to reduced profits of SOEs, loss-making SOEs became burdens on governmental budgets, leading to privatization.[139] Literature exists describing inefficient SOEs and explaining why SOEs run into difficulties theoretically and empirically.[140] Poor performance of SOEs was associated with protection from competition in the product and capital markets, and no negative consequences arose from SOEs' inefficient behavior. The government would cover their loses with grants of advantages.[141] There is political interference in operating decisions and potential conflicts between the government's role as an owner of an enterprise and as a regulator.[142] A number of studies and surveys provide evidence that privatization generally leads to improved performance through examining the net welfare change in terms of gains and losses to governments, buyers, consumers, workers, and others.[143] The government bond markets were not blooming, generating less yields for governments, making the governmental budgets more constrained.[144]

[138] The agent-principal problem is more severe within SOEs as compared to POEs since SOEs are not subject to takeover threats and less subject to the discipline of capital markets than POEs. *See* David E. M. Sappington and J. Gregory Sidak, "Anticompetitive Behavior by State-Owned Enterprises: Incentives and Capabilities," in *Competing with the Government, Anticompetitive Behavior and Public Enterprises*, eds., Richard R. Geddes (Hoover Institution Press, 2004), 6.

[139] Vickers, J., and V. Wright. "The politics of industrial privatization in Western Europe: An overview" *West European Politics* 4, 1-30 (October1998).

[140] Joseph E. Stiglitz, "Public enterprise economics: Theory and application," in *The Economic Role of the State,* ed. Heertje (Oxford, 1989), 9-85.

[141] Pier Angelo Toninelli, *The Rise and Fall of State-Owned Enterprise in the Western World* (Cambridge: Cambridge University Press, 2008), 22.

[142] Robert W. Poole, Jr. edited by Leonard Gilroy, Annual Privatization Report 2014: Air Transportation, http://reason.org/files/apr-2014-air-transportation.pdf
http://reason.org/files/6a983123788632131171e022e6466a7a.pdf

[143] William L. Megginson and Jeffry M. Netter, "From State to Market: A Survey Of Empirical Studies On Privatization," 39(2) *Journal of Economic Literature* (June 2001): 321-389; Stephen J.K Walters, *Enterprises, Government and the Public* (New York: McGraw-Hill Book, 1993), 104; Madanmohan Ghosh and John Whalley, "State-owned Enterprises, Shirking and Trade Liberalization" (NBER Working Paper Series, Working Paper 7696. May 2000) http://www.nber.org/papers/w7696 ; Davie Haarmeyer and Peter Yorke, "Port Privatization: An International Perspective," Policy Study No. 156, April 1993, http://reason.org/files/6a983123788632131171e022e6466a7a.pdf

[144] Bryan Taylor, "How 3 Countries Lost Their Position as The World's Dominant Financial Power Over The Last 800 Years," *Business Insider*, Dec.8, 2013. http://www.businessinsider.com/700-years-of-government-bond-yields-2013-12

c. Changed Western Ideology

The ideas and values about the role that government should play in economies can also explain why SOEs and grants of advantages became problematic. In the first decades of the Industrial Revolution, the ideas of mercantilism gave way to the idea of laisez-faire, which means that the economy should be free from governmental intervention.[145] The ideas of free trade and private enterprises began around 1760s from the statement of William Blackstone about a man's natural liberty,[146] and then Adam Smith's *The Wealth of Nations* in 1776 "applied the idea of natural liberty to the nation state". Smith argued that the market mechanism worked through the invisible hand in which each individual pursues its own interest, and public interests could also be achieved. The idea of free trade and limited government won the battle of ideas in the 19th century.[147] In practice, the value of free trade and open markets was also recognized by states to some degree in the 18th century. Most Europe and North America nations, and the colonies of the British Empire, had adopted market economies through the 19th century.[148] In the early 20th century, particularly Keynes's theory in the aftermath of the Depression, the idea that state should play an important role in economies emerged, leading to the enlargement of the role of the state in the economy.[149] However, in the1970s and 80s, ideology changed again that the private sector should play the major role in the economy while the role of SOEs should be restricted. Grants of advantages were perceived as governmental intervention with the economy and the existence of SOEs was perceived as the direct participation of governments in the economy. Hence, they were contrary to the idea that the private sector should be the major player in the economy while the government should restrain from intervention or participation in the economy.

[145] Ludwig von Mises, "Facts About the 'Industrial Revolution'", in Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 55; Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 28.
[146] William Blackstone, *Commentaries on the Laws of England* (Oxford University Press 2016).
[147] Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 1-3.
[148] Stephen Gold, "The Rise of Markets and the Fall of Infectious Disease," in Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 80.
[149] The Fabian Society was formed in the late 19th century to push for socialism. *See* John N. Hazard, "State Trading in History and Theory," 24 *Law and Contemporary Problems* 243-255 (Spring 1959), 244; Jagdish Bhagwati, *The World Trading System at Risk* (Princeton University Press, 1991), 110.

(3) Reactions to the Problem

a. Privatization Waves

A privatization wave occurred in the late 20th century in the UK, European countries, North America, Australia, New Zealand and other OECD countries. For instance, in the UK, the privatization wave occurred in major strategic heavy industries and public utilities from 1979-1990.[150] The privatization wave also occurred in Taiwan, Singapore and other countries in 1970s.[151] A privatization wave in Latin America, in Africa, and in Asia countries other than the communist countries occurred in 1980s and 1990s.[152] The privatization wave expanded further in the 1990s, encompassing the countries emerging from former communist countries after collapse

[150] Margaret Thatcher's Conservatives in 1979 led to the vast majority of nationalized industries, services and utilities privatized within a decade. *See* "History of Nationalization" lawin.org. 04, 2013, accessed 03 2016. http://lawin.org/ ; John Vickers & George Yarrow, "Privatization in Britain," in *Privatization and State-owned Enterprises*, ed. by Paul W. Macavoy, W. T. Stanbury, George Yarrow and Richard J. Zeckhauser, (1989), 210; Tony Prosser and Michael Moran, "Privatization and Regulatory Change: The Case of Great Britain," in Michael Moran and Tony Prosser ed., *Privatization and Regulatory Change in Europe* (Open Uni. Press, 1994), 35-8; News Analysis Theory Comment, Nationalization, Economics Online, http://www.economicsonline.co.uk/Business_economics/Nationalisation.html ; In France, many of those companies nationalized in 1982 (banks, electronics and communications) were privatized after 1986. *See* William L. Megginson & Jeffry M. Netter, "From State to Market: A Survey of Empirical Studies on Privatization," 39 (2) *Journal of Economic Literature* (June 2001): 321-389, 325; "History of Nationalization" lawin.org. 04, 2013. Accessed 03 2016. http://lawin.org/ ; Germany, Italy, Spain and other European countries launched large privatization programs during the 1990s. *See* Sabino Cassese, "Deregulation and Privatization in Italy", in Michael Moran & Tony Prosser (edited), Privatization and Regulatory Change in Europe (Open Uni. Press, 1994), 51-62; Canada largely sold federal and provincial Crown corporations to private investors in 1970s and 1980s, and privatized national railways in 1995. *See* W.T. Stanbury, "Privatization in Canada: Ideology, Symbolism or Substance?" in *Privatization and State-owned Enterprises*, eds. Paul W. Macavoy, W. T. Stanbury, George Yarrow and Richard J. Zeckhauser, 273-340 (Springer Netherlands, 1989), 273-300.

[151] Pier Angelo Toninelli, *The Rise and Fall of State-Owned Enterprise in the Western World* (Cambridge: Cambridge University Press, 2008), 11.

[152] By 1992, Mexico had privatized 361 of its 1200 SOEs, with only the giant PEMEX oil company (an SOE) remains. *See* William L. Megginson and Jeffry M. Netter, "From State to Market: A Survey of Empirical Studies on Privatization," 39 (2) *Journal of Economic Literature* (June 2001): 321-389, 326; Brazil began privatization since 1980s. *See* Rogério L. F. Werneck, "The Uneasy Steps toward Privatization in Brazil," in *Privatization in Latin America: Myths and Reality*, eds., Alberto Chong and Florencio López-de-Silanes (Stanford University Press 2005), 59.

of the communist regime.[153] An extensive literature and data exist about the intensity of privatization from 1980-1991.[154]

b. Reduction of the Number of STEs and the Grants of Advantages

The number of STEs is decreasing, and the transparency of STEs and SOEs has increased relatively. In 2015, 20 Members reported a total of 77 agriculture exporting STEs, among which China, Colombia and India accounted for 69% of the total, with China accounting for 25 agriculture exporting STEs as the number one.[155] Australia had over time reformed its agricultural trade policies and the number of STEs had declined from 9 in 1995 to 7 by 2004 and further down to 4 by 2006 and solely 1 by 2012.[156] Special commitments were made by the former communist countries, such as Bulgaria, Mongolia, China and Russia, in their accession to the GATT or WTO regarding the activities of SOEs and advantages granted to SOEs.[157] Russia promised in its accession that Gazprom would be notified as an STE in accordance with Article XVII of the GATT 1994, and promised to be transparent.[158] Russia has promised to reform the regulatory system for natural gas exports. For instance, Gazprom no longer has an exclusive right to export liquefied natural gas.[159]

The number of monopoly rights held by SOEs also declined largely due to withdrawal of such rights or the privatization of SOEs by governments. For instance, regarding telecommunications

[153] Such as Bulgaria, Czechoslovakia, Romania, Hungary (since 1960s) and Poland (since 1980s). *See* Robert W. Poole, "The Concise Encyclopedia of Economics: Privatization," *Library Economics Liberty*, http://www.econlib.org/library/Enc/Privatization.html ; Michael Mejstrík and Milan Sojka, "Privatization and Regulatory Change: The Case of Czechoslovakia," in *Privatization and Regulatory Change in Europe*, eds. Michael Moran and Tony Prosser (Open Univ. Press, 1994), 66-85; Roman Frydman, Andrzej Rapaczynski and John S. Earle (et al), *The Privatization Process in Central Europe*, Volume 1 (Oxford University Press, 1993), 3, 40, 95, 148, 210.
[154] Mary M. Shirley, "The What, Why, and How of Privatization: A World Bank Perspective", 60 Fordham L. Rev. S23 (1992), Issue 6, S33-S36 (graph 1, 2, 3, 4). http://ir.lawnet.fordham.edu/flr/vol60/iss6/2
[155] Only a few Members provided information on export values, prices and destinations so it was difficult to assess the influence of agricultural exporting STEs on global markets. *See* Minutes of the Meeting of the Working party on State Trading Enterprises, June 25, 2015, G/STR/M/27, paras.3. and 22.
[156] Currently the only STE is the Rice Marketing Board of New South Wales. *See* Minutes of the Meeting of the Working party on State Trading Enterprises, June 25, 2015, G/STR/M/27, para.12.
[157] These countries, prior to their accession to the WTO, liberalized their foreign trade, and initiated their privatization programs. *See* William J. Davey, "Article XVII GATT: An Overview" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 17-36 (University of Michigan Press, 1998), 33.
[158] The Working Party Report of Russia's accession to the WTO, para. 88.
[159] Minutes of the Meeting of the Working party on State Trading Enterprises, June 25, 2015, G/STR/M/27, paras. 26 and 28.

in the European Countries, the number of exclusive rights on terminal equipment declined from thirty-five to three from 1988 to 1991, in pursuance to the EU Commission's directive.[160] In Taiwan, the monopoly in telecommunications was eliminated in 1996, and SOEs in the petroleum industry gave up monopoly rights over the extraction of oil and upstream processing of oil after Taiwan's accession to the WTO in 2002.[161] The monopoly was broken up in the process of privatization to ensure that large monopolies and oligopolies were not sold intact.[162] For instance, East Germany started out with 6100 firms to privatize. A year later, it had 9000 companies to privatize. The increase resulted from the breakup of monopolies.[163] When Brazil sold off its telecommunications giant, it divided it into 12 different line and cellular companies.[164] Hence, monopoly power was reduced and competition increased.

Grants of financial advantages in European countries have reduced largely.[165] European countries were moving towards a single and integrated market, which required that all enterprises within EU were operating in a level playing field, that SOEs should not have unfair competitive advantages merely because of their state ownership. Over the long term, subsidies are on a downward trend, since they are down from nearly 1 percent of EU GDP in the 1990s to 0.5 percent of EU GDP in the period of 2004-2008.[166]

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[160] *See* Commission Directive 88/301/EEC of 16 May 1988 on Competition in the Markets in Telecommunications Terminal Equipment. http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31988L0301 ; Andre Sapir, "The Role of Articles 37 and 90 ECT in the Integration of EC Markets: The Case of Utilities," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 231-244 (University of Michigan Press, 1998), 235.

[161] Chao-Chung Kang, "Privatization and Production Efficiency in Taiwan's Telecommunications Industry, Telecommunications Policy," Volume 33, Issue 9 (October 2009): 495-505; Xuejin Zuo and Hangsheng Cheng, *State-owned Enterprise Governance in China: An International Comparative Perspective* (China: Social Science Academic Press, 2006), 1-14.

[162] Mary M. Shirley, "The What, Why, and How of Privatization: A World Bank Perspective," 60 *Fordham L. Rev*. S23 (1992): S31. http://ir.lawnet.fordham.edu/flr/vol60/iss6/2

[163] *Ibid*.

[164] Jon Basil Utley, "Lessons for Europe from Latin American De-Nationalization," (Privatization) Programs (Lecture Delivered in Cyprus), *Hispanic American Center for Economic Research*. http://www.hacer.org/news/lessons.php

[165] Data can be found e.g., State Aid Statistics, European Commission, available at http://ec.europa.eu/competition/state_aid/statistics/statistics_en.html State Aid Scoreboard from 1997 to 2015, available at http://ec.europa.eu/competition/state_aid/studies_reports/archive/scoreboard_arch.html

[166] OECD, "Global Forum on Competition," Ninth Meeting 18-19 Feb. 2010, Background Documentation, Keynote speech by Joaquin Almunia, "Competition, State aid and Subsidies in the European Union", 9th Global Forum on Competition, (Paris: OECD, 18 Feb. 2010), 3.
http://www.oecd.org/competition/globalforum/GlobalForum-February2010.pdf

(4) Summary

In a nutshell, the extent of SOEs and grants of advantages to them are different across capitalist countries, developing countries, and communist countries, in the forms of state trading, nationalization, subsidies, giving monopolies or exclusive rights, import substitution, etc. Due to interdependence among nations and increased trade, SOEs' inefficient performance became a burden for governments, and changed western ideology that governments should be restrained from interference with economies, grants of advantages to SOEs have been perceived as problematic. Hence, privatizations waves occurred along with reduction of subsidies, the number of STEs, etc. Nevertheless, the presence of SOEs and SOEs' receipt of advantages are still pervasive in emerging countries, such as China, which will be explained in chapter two.

2.2.3 SOEs Have Been Perceived as a Problem Targeted by Regulations

As trade and economies became more interconnected, concerns about SOEs and their effects on trade grew. Consequently, regulations such as GATT and EU rules came out. No regulations regarding granting advantages to enterprises existed before the 19th century at the international level. In the late 19th century, countries unilaterally used countervailing duties laws against advantages granted by governments to enterprises, particularly SOEs.[167] The U.S.'s original countervailing duty statute can be found in the Tariff Act of 1897.[168] Apart from that, regional efforts in European countries and the international efforts such as the early GATT developed rules more or less disciplining SOEs and grants of advantages, as well as the TPP Agreement and recent efforts in FTAs negotiations initiated by the U.S.

(1) Global Efforts: Early GATT

Advantages granted to SOEs could be partially caught by rules regarding state trading and subsidies in GATT 1947. State trading and subsidies were perceived as problematic in early GATT.

[167] John F. Coyle, "The Treaty of Friendship, Commerce, and Navigation in the Modern Era" 51 *Columbia Journal of Transnational Law* (2013): 302.
[168] Tariff Act of 1897, ch. 11; 30 Stat. 151, 205;

This is because first, state trading and subsidies could constitute trade barriers. Second, subsidies and state trading could undermine negotiated tariff commitments under the GATT. [169] Third, the GATT was based on assumptions that international trade was to be conducted primarily by private firms, not by state enterprises and government intervention was to be limited.[170] Hence rules were made to limit subsidies and conform state trading to market conditions in the early GATT.[171] Last, since the GATT was established on the assumption of the market economy in its Contracting Parties,[172] the rules regarding state trading and subsidies were negotiated with the market economy kept in mind. However, the state trading and subsidies in non-market economies might present challenges for these rules. Hence, additional commitments were made for non-market economies in their accession to the GATT.

a. Rules Regarding Subsidies (Financial Advantages)

With respect to financial advantages granted to SOEs, the early GATT rules regarding subsidies disciplined them to some extent over the time. In 1943, delegations from the UK and the U.S. met in Washington to discuss postwar economic issues, and agreed that barriers to international trade should be reduced as much as politically possible. "On subsidies, the U.S. position was that export subsidies could not be abolished unless other countries restricted their use of domestic subsidies. The British took a more relaxed view of domestic subsidies but wanted to reign in export subsidies." [173] In 1944, the U.S. State Department-led interagency group completed a draft convention, i.e., "Proposed Multilateral Convention on Commercial Policy", which provided rules regarding subsidies that both export and domestic subsidies should be prohibited, except transitional export subsidies and for products in chromic world surplus.[174]

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[169] Douglas Irwin, Petros Mavroidis & Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 157-161.
[170] Andreas F. Lowenfeld, *International Economic Law*, 2nd edition (Oxford University Press, 2008), 24-5.
[171] U.S. "Proposals for Expansion of World Trade and Employment", 1945, for consideration by an International Conference on Trade and Employment. US Dep't of State, Press Release of 6 Dec. 1945, 13 US Dep't of State Bulletin 912-929 (1945). US Dep't of State, Publication No. 2411 (Commercial Policy Series No. 79, 1945).
[172] At the time of 1947, all the Contracting Parties of the GATT were market economies. The U.S.S.R refused to attend negotiations.
[173] Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 58-62.
[174] "Articles of Agreement for a Proposed Multilateral Convention on Commercial Policy," Harry Hawkins's Executive Committee on Economic Foreign Policy (Oct. 1944); *See* Michael Franczak, "Multilateralism with an American Face: The United States, Great Britain, and the Formation of the Postwar Economic Order, 1941-1947," A

In 1945, the British loan negotiations were held in Washington (U.S. loan to Britain), the Anglo-American negotiators agreed to discuss five key issues: tariffs and preferences, subsidies, state trading, exchange controls, and cartels.[175] On subsidies, the U.S. planned to phase out domestic (agricultural) subsidies, but wanted to preserve export subsidies. The United Kingdom wanted to keep domestic agricultural subsidies but abolish all export subsidies.[176] In the final text, the two sides agreed that "members should undertake not to take any action which would result in the sale of a product in export markets at a price lower than the comparable price charged for the like product to buyers in the home market within three years of an agreement, with a special provision for commodities in surplus."[177]

Developing countries focused on employment, and emphasized using the instruments of import control measures for the purpose of domestic economic development and full employment. Hence, compromises were made that less stringent rules on subsidies could be exchanged for much stricter rules on import control measures. Thus, subsidies were more tolerated than import control measures, resulting in less stringent rules on subsidies. [178] Nevertheless, from looking at the history of the GATT, rules became more stringent as time passed.

The first preparatory meeting was held in London (the London Conference) in 1946.[179] Article 30 of the London Draft, similar to the U.S.'s proposal,[180] reflects the first multilateral regulation of

thesis submitted in partial fulfillment of the requirements for the degree of Bachelor of Arts with Hours, (20 Mar. 2011), 100; *Irwin*, id., at 75-8.

[175] *See* Foreign Relations of the United States: diplomatic papers, 1945, Volume VI, p138, FRUS (1945, VI, 138), http://images.library.wisc.edu/FRUS/EFacs/1945v06/reference/frus.frus1945v06.i0005.pdf ; Documents of British Policy Overseas (DBPO) (III, 181-183), http://diplomatic-documents.org/editions/united-kingdom (need login in)

[176] United States Department of State, Foreign relations of the United States: diplomatic papers, 1945. The British Commonwealth, the Far East, Volume VI, U.S. Government Printing Office, 1945 (FRUS 1945 VI, 140), http://images.library.wisc.edu/FRUS/EFacs/1945v06/reference/frus.frus1945v06.i0005.pdf

[177] Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 105.

[178] *Id*., 77-8.

[179] It was held by the UN Preparatory Committee for the International Conference on Trade and Employment. The documentation for the conference was published by the Economic and Social Council of the United Nations document series E/PC/T, there are several committees, and one committee was for GATT. https://www.wto.org/gatt_docs/1946_50.htm

[180] Section E, Article of Suggested Charter for an International Trade Organization of the United Nations, Department of State, September1946.
https://law.drupal.ku.edu/sites/law.drupal.ku.edu/files/docs/resources/library/IntlTradeLaw/1946%20Suggested%20Charter%20for%20an%20International%20Trade%20Organization%20of%20the%20United%20Nations.pdf

subsidies with a bifurcated approach that export subsidies were in principle prohibited with some exceptions; other trade-affecting subsidies were subject to loose disciplines, mainly procedural requirements.[181] The New York Conference reproduced the London Draft, and rules regarding export subsidies providing that export subsidies shall be abolished within three years from the advent of the ITO, were included in NY Draft ITO Charter, but not in NY Draft of GATT.[182] The ITO Charter (the Havana Charter), which didn't came into force, provided notification and discussion obligations for trade-affecting subsidies, and prohibition of export subsidies with exceptions for primary commodities.[183]

In the 1947 Geneva Conference, the Geneva draft GATT Article XVI, originally consisted of only one paragraph (XVI:1) without incorporation of substantive obligations regarding export subsidies.[184] Article XVI:1 of GATT 1947 provided the reporting and discussion obligations, and no definition of subsidies was given.[185] Article VI of GATT 1947 authorized importing parties to use countervailing duties on imported goods up to the amount of the subsidy.[186] Article III:8 provided that subsidies were exceptions to the national treatment obligation. Article II:4 was also applicable. Meanwhile, non-violation complaints under GATT article XXIII:1(b) could be resorted to through claims that subsidization by other Contracting Parities had nullified the benefits of tariff

[181] Report of the First Session of the London Preparatory Committee of the United Nations Conference on Trade and Employment" (UN Document E/PC/T/33), October 1946, (London Draft); E/PC/T/C.II/61, E/PC/T/C.II/60, E/PC/T/C II/60, E/PC/T/C.II & IV/PP/PV/2, E/PC/T/C.II & IV/PP/PV/1, https://www.wto.org/gatt_docs/1946_50.htm ; Dominic Coppens, *WTO Disciplines on Subsidies and Countervailing Measures: Balancing Policy Space and Legal Constraints* (Cambridge University Press, 2014), 21-2; Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 157-61.

[182] Report of the Drafting Committee of the Preparatory Committee of the UN Conference on Trade and Employment", (New York Draft), UN Document EPCT/34, (Lake Success, NY, 5 Mar. 1947, https://www.wto.org/gatt_docs/1946_50.htm https://www.wto.org/gatt_docs/English/SULPDF/92290038.pdf E/PC/T/C.6/55, 1947, https://www.wto.org/gatt_docs/English/SULPDF/90230108.pdf https://www.wto.org/gatt_docs/1946_50.htm ; Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 120-21.

[183] Articles 25, 26, 27 and 28 of the Havana Charter. https://www.wto.org/english/docs_e/legal_e/havana_e.pdf

[184] Para 1 of Art. XVI of GATT; Robert O' Brien, *Subsidy Regulation and State Transformation in North America, the GATT and the EU* (Basingstoke, Hampshire, England: Macmillan Press, 1997), 105; Export subsidy disciplines were primarily about competition between countries in markets of a third country, an area not covered by the GATT, which initially aimed at reducing import barriers, hence, domestic subsidies were disciplined due to the fact that they impede concessions made in respect of market access, *see* E/PC/T/TAC/PV/11, (September 5, 1947), 14-5. https://www.wto.org/gatt_docs/English/SULPDF/90260038.pdf

[185] *See* Article XVI: 1 of GATT 1947. Peter Van Den Bossche, *The Law and Policy of the World Trade Organization, Text, Cases and Materials*, 2nd edition (Cambridge University Press, 2010), 559.

[186] *See* Article VI: 3 of GATT 1947.

concessions.[187] At the time of 1948, no contracting parties were centrally planned economies. [188] Hence, it was reasonable that no reference were made to subsidies granted to SOEs.

In the 1954-55 review session, given the divergence among developed countries, and between developed and developing countries, a final compromise was made that additional disciplines would be imposed on export subsidies only and would not amount to a total ban.[189] It took the form of the additional paragraphs 2 through 5 to Article XVI, with distinction between "primary" and "non-primary" products.[190] Article XVI:3 provided export subsidies on primary products were allowed unless they resulted in a contracting party having more than equitable share of world export trade in that product.[191] Article XVI:4 provided that export subsidies on non-primary products were prohibited if these subsidies would reduce the sales price on the export market below the sales price on the domestic market, which was a bi-level pricing test.[192] Only 17 countries accepted the these changes.[193] Developing countries objected to the differential treatment of primary and other goods.[194]

The Tokyo Round negotiation (1973-9) generated the Subsidies Code.[195] Track I of the Subsidies Code allowed imposition of CVDs subject to a material injury test, but it lacked the definition of

[187] Dominic Coppens, *WTO Disciplines on Subsidies and Countervailing Measures: Balancing Policy Space and Legal Constraints* (Cambridge University Press, 2014), 24.
[188] GATT was signed on 1st Jan. 1948 by Australia, Belgium, Brazil, Canada, France, India, Luxembourg, Myanmar, Netherlands, New Zealand, Norway, Pakistan, South Africa, Sri Lanka, UK, US, Zimbabwe, all of which were not central planned economies.
[189] Developed countries favored a strengthening of the disciplines on subsidies and prohibiting export subsidies at least on non-primary products. Developing countries proposed a series of exceptions for developing countries. The U.S. proposed that subsidies should not lead to the subsidizing state acquiring more than an equitable share of world trade. Australia proposed that a ban should also imposed on domestic subsidies. For more about different positions by different contracting parties, *see* Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 157-161; Dominic Coppens, *WTO Disciplines on Subsidies and Countervailing Measures: Balancing Policy Space and Legal Constraints* (Cambridge University Press, 2014), 24-5.
[190] Paragraph 2 through 5 of Article XVI of GATT.
[191] See Article XVI: 3 of GATT 1947.
[192] *See* Article XVI: 4 of GATT 1947.
[193] MTN.GNG/NG10/W/4, (April 28 1987), 75.
https://docs.wto.org/gattdocs/q/.%5CUR%5CGNGNG10%5CW4.PDF
[194] Peter Van Den Bossche, *The Law and Policy of the World Trade Organization, Text, Cases and Materials*, 2nd edition (Cambridge University Press, 2010); John H. Jackson, *World Trade and the Law of GATT* (Lexis Law Pub., 1969), 372-374.
[195] Agreement on Interpretation and Application of Article VI, XVI and XXIII of the General Agreement on Tariffs and Trade (the Subsidies Code) (MTN/NTM/W/236, April 5, 1979). https://www.wto.org/gatt_docs/English/SULPDF/91990092.pdf

"subsidy" in the context of national CVDs rules.[196] Track II prohibited export subsidies regarding non-primary goods without the bi-level pricing test found in Article XVI of GATT. It also included a list of practices entitled "illustrative list of export subsidies" in the annex.[197] It also provided loose disciplines on domestic subsidies that affect goods in international trade.[198] It addressed the subject factor of subsidy, which shall be deemed to include subsidies granted by any government or any public body.[199] Agriculture was left out.[200] However, the Subsidies Code bound the signatories to that code in ways that superseded GATT Article XVI. Nevertheless, it was a plurilateral agreement, and only 24 contracting parties accepted it.[201]

b. Rules Regarding State Trading (Monopolies and Exclusive rights)

With respect to monopolies or exclusive rights granted to SOEs, GATT rules regarding STEs disciplined them to some extent over the time. In 1943, the meeting between the UK and U.S. discussed cartels and restrictive business practice, and U.S. was opposed to any monopolistic behavior, while the UK advocated a case-by-case policy with respect to monopolistic practices.[202] In 1944, the "Proposed Multilateral Convention on Commercial Policy" by the U.S. provided that state trading should guarantee equality of treatment, and aimed "to lay down fair rules of trade, with reference to government monopolies and state trading, including trade between countries where private enterprise prevails and those where foreign trade is managed by the state", as well as provisions on restrictive business practices.[203] "On state trading, the UK officials emphasized

[196] Article 1 and 6 of the Subsidies Code; John H. Jackson, The World Trading System: Law and Policy of International Economic Relations, 2nd edition (Cambridge, MA: MIT Press, 1997), chapter 11.
[197] Article 9 of the Subsidies Code and Annex; John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd edition (Cambridge, MA: MIT Press, 1997), chapter 11.
[198] Article 8 of the Subsidies Code.
[199] "In this Agreement, the term 'subsidies' shall be deemed to include subsidies granted by any government or any public body within the territory of a signatory…(omitted)" See footnote 1 on page 18 of The Agreement on Interpretation and Application of Article VI, XVI and XXIII of the General Agreement on Tariffs and Trade (the Subsidies Code).
[200] Robert O' Brien, *Subsidy Regulation and State Transformation in North America, the GATT and the EU* (Basingstoke, Hampshire, England: Macmillan Press, 1997), 114.
[201] Dominic Coppens, *WTO Disciplines on Subsidies and Countervailing Measures: Balancing Policy Space and Legal Constraints* (Cambridge University Press, 2014), 46.
[202] Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 60.
[203] United States Department of State, Foreign relations of the United States diplomatic papers, 1944. General: economic and social matters, Volume II, U.S. Government Printing Office, 1944, http://digicoll.library.wisc.edu/cgi-bin/FRUS/FRUS-idx?type=header&id=FRUS.FRUS1944v02&isize=M FRUS (1944 II, 71, 72,87). http://images.library.wisc.edu/FRUS/EFacs/1944v02/reference/frus.frus1944v02.i0005.pdf

strongly their desire to avoid having any words hostile to state trading."[204] In 1945, during the British loan negotiations in Washington, the Anglo-American negotiators agreed to discuss five key issues, among which was state trading and cartels, and "there was no major difference in view with regard to state trading."[205] On cartels, the United States and the UK kept their contrary positions as in 1943.[206] Ultimately, the United States essentially accepted the U.K. position.[207]

In the London Conference, Article 32 of London Draft dealt with state monopolies of individual products, and Article 33 dealt with the extraordinary case of complete state monopolies of import trade.[208] The New York Conference added a provision on mark up prices, which was proposed by the U.S., that provided "The charging by a state enterprise of different prices for its sales of a product in different markets, domestic or foreign, is not precluded by the provision of the Article, provided that such different prices are charged for commercial reasons." [209] It remains in Article XVII of the GATT.[210] Article 32 and 33 of the New York Draft dealt with monopolies of individual products, and expansion of trade by state monopolies. In the Geneva Conference, Czechoslovakia, already a communist state, proposed that GATT would not be reserved to market economies only.[211] Nevertheless, the conference restated that STEs should not base their decisions on political considerations. The Havana Conference made no change of substance in this regard. The review session didn't lead to any meaningful change.[212]

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[204] Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 80.

[205] Foreign Relations of the United States diplomatic papers, Volume 6, FRUS (1945, VI, 138), (1945),138. http://images.library.wisc.edu/FRUS/EFacs/1945v06/reference/frus.frus1945v06.i0005.pdf ; the British account in Documents of British Policy Overseas (DBPO) (III, 181-183). http://diplomatic-documents.org/editions/united-kingdom (need login in)

[206] United States Department of State, Foreign relations of the United States: diplomatic papers, 1945. The British Commonwealth, the Far East, Volume VI, U.S. Government Printing Office, 1945 (FRUS 1945 VI, 144). http://images.library.wisc.edu/FRUS/EFacs/1945v06/reference/frus.frus1945v06.i0005.pdf

[207] *Id.,* at 144; Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 106.

[208] Report of the First Session of the London Preparatory Committee of the United Nations Conference on Trade and Employment" (London Draft) (UN Document E/PC/T/33), October 1946,

[209] In the footnote, paragraph 1 (e), Article 31, Report of the Drafting Committee of the Preparatory Committee of the UN Conference on Trade and Employment, UN Document E/PC/T/34 (Lake Success, NY, 5 Mar. 1947) (New York Draft) https://www.wto.org/gatt_docs/1946_50.htm https://www.wto.org/gatt_docs/English/SULPDF/92290038.pdf

[210] The Interpretative Note Ad Art. XVII of GATT.

[211] Petros C. Mavroidis, *The Regulation of International Trade: Volume 1: GATT* (The MIT Press, 2015), 401.

[212] Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 157-161.

c. Rules Regarding Regulatory Advantages

With respect to regulatory advantages granted to SOEs, a non-discrimination principle was applicable. With respect the various advantages granted to SOEs in communist countries, additional commitments were made upon their accessions into the GATT. The dispute settlement procedures in Article XXII and XXIII regarding legal remedies for "nullification or impairment" of GATT rules, had been used for the settlement of disputes involving STEs.[213]

Overall, the GATT rules were fairly limited in their effect on STEs and subsidies.

(2) Regional Efforts: the European Community Developed Relevant Competition Rules

a. Rules Developed in the Integration of a Single Market

The existence of SOEs and grants of advantages (monopolies, exclusive rights, financial advantages, and regulatory advantages) threaten the goal of "a single market" pursued by European countries in the process of integration.[214] Hence, in integrating markets in the European countries, SOEs and grants of various advantages came to be partially caught by the competition rules regarding state aid and state undertakings with exclusive rights, as well as other rules that may be applicable.[215]

The Treaty of Paris in 1951 established the European Coal and Steel Community (ECSC), which aimed to create a common market for coal and steel in member states.[216] The ECSC had authority over the production, prices, importation and exportation of coal and steel. The Treaty prohibited discriminatory pricing and unfair competitive practices so as to promote free competition. Hence,

[213] Ernst-Ulrich Petersmann, "GATT Law on State Trading Enterprises: Critical Evaluation of Article XVII and Proposals for Reform," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 71-96 (University of Michigan Press, 1998), 76.
[214] George Bermann, Roger Goebel, William Davey and Eleanor Fox, *Cases and Materials on European Union Law*, 3rd edition (West Academic Publishing, 2010), 1043-44.
[215] For a brief introduction of rules of EU, *see* OECD, "State Owned Enterprises and the Principle of Competitive Neutrality, Policy Roundtables," DAF/COMP(2009)37, (2009), 51-2.
[216] Treaty establishing the European Coal and Steel Community (ECSC Treaty). http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV:xy0022

any conduct that could distort free competition and threaten ECSC goals would be disciplined, like concentrations and abuses of dominant positions. Behavior of SOEs and the grants of advantages would be disciplined to the extent that they undermined free competition in the coal and steel industries, e.g., affecting the production or price, restricting competition and so on. The Treaty of Rome in 1957, creating the European Economic Community (EEC), aimed to create a common market and a custom union, by the free movement of persons, services, goods and capital.[217] The Treaty prohibited state aids with exceptions and had provisions regarding public undertakings.[218] Afterwards, the 1992 Treaty of Maastricht (TEC), establishing the European Union, further developed the rules regarding subsidies and public undertakings, by revising Articles 92 and 94 about state aid.[219] The Treaty of Lisbon in 2009 (TFEU) incorporated the above rules.

(b) Detailed Rules Disciplining Different Aspects

With respect of the existence of SOEs, Article 345 of TFEU provides for the neutrality of property ownership.[220] Hence, the existence of SOEs is allowed.

With respect to financial advantages granted to SOEs, under the competition rules, state aid is prohibited unless authorized.[221] Article 107 (1) captures any provision of state resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods.[222] Article 107(2) lists forms of aid that "shall be compatible" with the internal market, automatically allowing three kinds of state aids.[223] Article 107 (3) sets circumstances under which state aid may be authorized.[224] Article 108 sets forth procedures for notifications and provides that state aid must not be put into effect until authorized by the EU

[217] Treaty Establishing the European Economic Community. (Treaty of Rome 1957).
[218] Treaty Establishing the European Economic Community. (Treaty of Rome 1957), Articles 92, 93 and 94 on Aids Granted by States, and Article 90 on public undertakings; *See also* Frieder Roessler, "State Trading and Trade Liberalization," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 7261-284 (UK: Palgrave Macmillan, 1982), 261-82.
[219] Treaty of Maastricht on European Union (TEC) inserted Article 92(3) on make exceptions for aid to promote culture and heritage conservation, and revised Article 94 on procedural issues.
[220] Article 345 of TFEU (Article 222 of ECT).
[221] Articles 107 and 108 of TFEU.
[222] Article 107.1 of TFEU.
[223] Article 107. 2 of TFEU.
[224] Article 107.3 of TFEU.

Commission.[225] If a Member State grants illegal aid, it must recover it from the recipient, with potential exceptions.[226] Hence, financial advantages granted to SOEs are subject to rules regarding state aid.

With respect to monopolies or exclusive rights granted to SOEs, they can be caught by Article 106 on public undertakings granted special or exclusive rights and Article 37 on state monopolies of a commercial character.[227] First, in terms of applicability, SOEs generally can be deemed to be public undertakings, caught by Article 106 given that the scope of public undertakings, as defined in Article 106, is broad. Public undertakings under Article 106 are defined as any entity that carries out economic activities, where the state exercises some degree of control through holding the majority of the share capital or of the votes or having the right to appoint the majority of the seats in the executive organ of the entity.[228] Even if SOEs fall outside the scope of public undertakings, Article 106 is still applicable if special or exclusive rights are granted to SOEs. Article 37 can cover grants of monopolies to SOEs as long as these SOEs are commercial.

Second, in terms of whether grants of monopolies or exclusive rights to SOEs are allowed or not, they are allowed under the treaty provisions as articulated in Article 37 and Article 106 of the TFEU in respect of trade in goods. Under Article 37, it seems that the treaty provision allows the existence/grants of monopolies to SOEs since the obligation of "adjustment" is only limited to non-discrimination.[229] Nevertheless, case law interpreted those provisions more widely than as merely prohibiting discrimination, and the decisions varied in this regard depending on the type of

[225] Article 108 of TFEU.
[226] *See* George Bermann, Roger Goebel, William Davey and Eleanor Fox, *Cases and Materials on European Union Law*, 3rd edition (West Academic Publishing, 2010),1085; Jacques H.J. Bourgeois, "EC Rules on State Monopolies and Public Undertakings: Any Relevance for the WTO?" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 161-180 (University of Michigan Press, 1998), 165.
[227] Article 106 of TFEU (ex Article 86 TEC, ex article 90 Treaty of Rome).
[228] The ECJ confirmed the Commission's decision that any undertaking over which the public authorities directly or indirectly exercise a dominant influence is a public undertaking. *See France, Italy and United Kingdom v. Commission*, joint cases 188 to 190/88, ECR 1982 p. 2545, ECLI:EU:C:1982:257, Judgement of July 6, 1982, at 26. Commission Directive 80/723 O.J. 1980 L 197/35; Jacques H.J. Bourgeois, "EC Rules on State Monopolies and Public Undertakings: Any Relevance for the WTO?" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 161-180 (University of Michigan Press, 1998), 164.
[229] Article 37 of TFEU (ex Article 31 TEC)

monopolies.[230] Under Article 106, the practice by the Commission and some case law suggest that the grants of monopolies or exclusive rights may be inconsistent with Article 106, based on the combination of Article 106 (1) with other provisions in the Treaty, given that Article 106 (1) refers to other provisions in the Treaty. Hence, combining Article 106 (1) with competition rules, such as the prohibition on abuses of dominant position by an undertaking or undertakings (Article 102 of TFEU), it has been held that the grants of exclusive rights or monopolies were inconsistent with Article 106 if the grant of an exclusive right can inevitably induce the undertaking to abuse its dominant position, even in the absence of actual abusive behavior.[231] As for the combination of Article 106(1) with Articles 34 & 35 on free movement of goods, Members may be held to violate Article 106 in cases where the grants of monopolies or exclusive rights of importation or exportation constitute a restriction of trade in goods with effects equivalent to those of quantitative restrictions. [232] Hence, the grants of monopolies or exclusive rights may be challenged in respect of trade in goods. In respect of trade in services, grants of monopolies or exclusive rights to SOEs are allowed under Article 106. Nevertheless, the grants of monopolies or exclusive rights to SOEs in services may be challenged in the case of the combination of Article 106 with Article 56 on free movement of services, if it is found that it constitutes a restriction on trade in services.[233]

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[230] For instance, it has been seen how import monopolies are contrary to Article 37. *See* Jacques H.J. Bourgeois, "EC Rules on State Monopolies and Public Undertakings: Any Relevance for the WTO?" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 161-180 (University of Michigan Press, 1998), 169.

[231] Article 102 of TFEU (ex Article 82 TEC); United Brads Company en United Brands Continentaal BV tegen Commissie van de Europese Gemeenschappen. European Court Reports 1978-00207, (United Brands [1978] ECR 207), ECLI identifier: ECLI:EU:C:1978:22, Feb. 02, 1978. http://eur-lex.europa.eu/legal-content/NL/ALL/?uri=CELEX:61976CJ0027 ; Petros C. Mavroidis and Patrick A. Messerlin, "Has Article 90 ECT Prejudged the Status of Property Ownership?" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 345-360 (University of Michigan Press, 1998), 351; Jacques H.J. Bourgeois, "EC Rules on State Monopolies and Public Undertakings: Any Relevance for the WTO?" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 161-180 (University of Michigan Press, 1998), 171.

[232] Article 34 (ex Article 28 TEC); Article 35 (ex Article 29 TEC). Andre Sapir, "The Role of Articles 37 and 90 ECT in the Integration of EC Markets: The Case of Utilities," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 231-244 (University of Michigan Press, 1998), 237; Jacques H.J. Bourgeois, "EC Rules on State Monopolies and Public Undertakings: Any Relevance for the WTO?" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 161-180 (University of Michigan Press, 1998), 169.

[233] Article 56 of TFEU, ex article 49 of TEC; Elliniki Radiophonia Tileorassi [1991] ECR I-2925; M. Kerf, "The Impact of EC Law on Public Service Concessions," 18 *World Competition* 85 (1995): 101.

Third, with respect to the obligations imposed on SOEs with monopolies or exclusive rights, competition rules, non-discrimination rules and free movement rules are applicable.[234] Last, with respect to the obligations imposed on the states that give monopolies or exclusive rights to SOEs, states should not breach their commitments under competition rules, free movement rules and non-discrimination rules through the grants of monopolies or exclusive rights to SOEs.[235]

Article 106 (2) provides a limited derogation in a situation where the application of the Treaty would obstruct the performance of the special task assigned to the undertaking. This derogation is interpreted restrictively by the ECJ.[236] From examining the case law, if grants of monopolies or exclusive rights are found to be violating free movement rules, the exception in Article 106 (2) is not available, while if grants of monopolies are found to be violating Article 37, Article 106 (2) is available.[237]

With respect to other regulatory advantages granted to SOEs, competition rules, non-discriminatory rules and free movement rules may be applicable.

(3) Other Regional Efforts Recently (the TPP Agreement)

Quite recently, because Chinese SOEs have received various advantages and are actively engaging in regional and international markets, concerns arise in regional rules negotiations, particularly the U.S., which pushed hard on rules on SOEs on the TPP negotiations.[238] In the TPP negotiations,

[234] *Id*., at 167.
[235] Andre Sapir, "The Role of Articles 37 and 90 ECT in the Integration of EC Markets: The Case of Utilities," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 231-244 (University of Michigan Press, 1998), 237.
[236] The principle of proportionality would be applied to the invocation of such exemption, such that the task granted would be impossible to carry out if the Treaty applied, not merely more difficult to carry out. *See* Jacques H.J. Bourgeois, "EC Rules on State Monopolies and Public Undertakings: Any Relevance for the WTO?" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 161-180 (University of Michigan Press, 1998), 165-6.
[237] Judgment of the Court of 10 July 1984, Campus Oil Limited and others v. Minister for Industry and Energy and others, Campus Oil [1984] ECR 2742, at 19, Case 72/83. *European Court Reports 1984 -02727*, ECLI identifier: ECLI:EU:C:1984:256, http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A61983CJ0072 ; Bourgeois, *id*., at 169-70.
[238] The U.S. industry wants rules in a TPP agreement to ensure that SOEs do not "nullify or impair" market access in the party's home market, the markets of other TPP countries, or in third-country markets. *See* Ian F. Fergusson, Mark A. McMinimy and Brock R. Williams, "The Trans-Pacific Partnership (TPP) Negotiations and Issues for Congress," Congressional Research Service, 7-5700 www.crs.gov R42694, March 20, 2015.

there were proposals from its members about disciplines on SOEs receiving various advantages.[239] Ultimately, the TPP was concluded with a chapter on SOEs.[240] This chapter has provisions regarding non-commercial assistance to SOEs or given by SOEs; obligations imposed on SOEs' behavior, such as non-discriminatory treatment and the requirement to act in light of commercial considerations; transparency of SOEs; designated monopolies, particularly state monopolies; and various exceptions and long transitional periods. These rules were drafted with an eye on Chinese SOEs although China was not a party to the TPP negotiations.[241]

The U.S. also wants to incorporate detailed SOEs rules in future FTAs as well. For instance, the U.S. announced its intent to renegotiate the NAFTA, and listed objectives for this renegotiation.[242] Among many things, one objective in the list concerns state-owned and controlled enterprises, including the definition of SOEs, ensuring the behavior of SOEs accords with non-discriminatory treatment and with the requirement to make decisions based on commercial considerations, ensuring additional subsidy disciplines on SOEs, transparency requirements, overcoming evidentiary problems associated with litigation on SOEs, etc.[243]

These objectives in the NAFTA renegotiation are similar to the objectives and provisions in the

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https://www.fas.org/sgp/crs/row/R42694.pdf ; William Krist, edited with an introduction by Kent HugHes, "Negotiations for a Trans-Pacific Partnership Agreement," Program on America and the Global Economy Woodrow Wilson International Center for Scholars, ISBN: 978-1-938027-08-6.
https://www.wilsoncenter.org/sites/default/files/PAGE_TPP_REPORT.pdf

[239] The U.S.'s proposals and position can be found in Office of the United States Trade Representative, "State-Owned Enterprises and Competition Policy: SOEs: Leveling the Playing field for American Workers through Fair Competition". https://ustr.gov/trade-agreements/free-trade-agreements/trans-pacific-partnership/tpp-chapter-chapter-negotiating-7 ; For a general discussion about SOEs in the context of TPP Agreement Negotiations, *see* Tsuyoshi Kawase, "Trans-Pacific Partnership Negotiations and Rulemaking to Regulate Stat-Owned Enterprises", 29 July 2014, http://voxeu.org/article/trans-pacific-partnership-negotiations-and-rulemaking-regulate-state-owned-enterprises

[240] Chapter 17 of the TPP Agreement.

[241] Keith Bradsher, "International Business: Trans-Pacific Partnership's Potential Impact Weighed in Asia and U.S.", *New York Times*, July 8, 2015
http://www.nytimes.com/2015/07/09/business/international/trans-pacific-partnerships-potential-impact-weighed-in-asia-and-us.html?_r=0 ; Tuong Lai, "What Vietnam Must Now Do,", *New York Times* (The Opinion Pages), translated by Nguyen Trung Truc from the Vietnamese, April 6, 2015.
http://www.nytimes.com/2015/04/07/opinion/what-vietnam-must-now-do.html

[242] *See* Office of the United States Trade Representative, "USTR: Trump Administration Announces Intent to Renegotiate the North American Free Trade Agreement," U.S.T.R. Press Release, May 2017, https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/may/ustr-trump-administration-announces

[243] *See* Office of the United States Trade Representative, "Summary of Objective for the NAFTA Renegotiation," July 17, 2017, p. 11, https://ustr.gov/sites/default/files/files/Press/Releases/NAFTAObjectives.pdf ; Although Article 1503 of NAFTA touches SOEs, it leaves much to the hand of the WTO rules. The TPP Agreement may divert some attention from the WTO to elsewhere.

TPP Agreement. Hence, it is possible that these provisions and rules on SOEs in the TPP Agreement and the U.S.'s other FTAs will be implemented in the future.

(4) Summary

As trade and economies became more interconnected, concerns about SOEs and their effects on trade grew. Consequently, attempts to regulate SOEs were developed by GATT and the EU to a limited degree. Early on, GATT developed subsidies rules, which could be used to regulate SOEs receiving financial advantages, and developed state trading rules, which could discipline SOEs receiving monopolies or exclusive rights to some degree. In the integration of the European Community, competition rules regarding state aid could tackle the problem of SOEs receiving financial advantages. Rules on public undertakings are also relevant for SOEs receiving monopolies or exclusive rights. Recently, the United States has pushed for inclusion of detailed rules on SOEs in the TPP and in the planned NAFTA renegotiations.

2.2.4 Summary of Section 2.2

Historically, the phenomenon of having SOEs and giving advantages to SOEs has changed from having been perceived as non-problematic in times of an insular world, to problematic in times of globalization and interdependence among nations. After the Industrial Revolution, the extent of state involvement in economies became more intensive, ranging from establishing STEs, nationalization and subsidization to import substitution, across capitalist countries, developing countries and communist countries. SOEs and grants of advantages have been gradually perceived as problematic, due to increased international trade to the extent that SOEs, STEs and the grants of advantages led to international tensions and generated economic and political concerns; inefficient performance of SOEs and grants of advantages to them became burdens on governmental budgets; and the ideas and values of laisez-faire which has been embraced by Western countries along with their former colonies in practice.

Afterwards, privatization waves occurred worldwide. In addition, the number of STEs declined, the grants of subsidies were largely reduced, and governments withdrew the grants of monopolies to SOEs. The problem was also targeted by regulations. Early GATT developed rules on subsidies

and state trading that can be utilized to tackle the problem. Regional efforts in European countries also discipline SOEs and grants of advantages to them to some extent, such as competition rules in the European countries in their integration. Recent efforts can be found in that the United States has pushed for inclusion of detailed rules on SOEs in the TPP and in the planned NAFTA renegotiations. It is anticipated that rules on SOEs will be pushed for in U.S.'s future FTA negotiations.

2.3 Economic Analyses

In this Section, I explain why there is a need to discipline the various advantages granted to SOEs from an economic perspective. I proceed with the theories underlying international trade, and international trade agreements. Then, I explain how the operation of SOEs, particularly the grants of various advantages to SOEs and the behavior of SOEs, reduces global welfare and efficiency by distorting efficient allocation of resources and undermine the market access commitments made by countries.

2.3.1 International Trade Increases National and World Welfare/Efficiency

(1) The Comparative Advantage Theory

The theory of comparative advantage explains why nations trade with one another and why trade is mutually beneficial. It developed from the concept of absolute advantage and has different models. Adam Smith thought that trade is based on absolute advantage, which means that one nation would be more efficient than another in producing one commodity but less efficient than the other nation in producing a second commodity.[244] Such trade is good for both two countries if they trade with one another.[245] This is because the output of both commodities will rise due to the division of labor. Each country can gain from trade and the world wealth is enhanced due to

[244] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 28.
[245] With the assumption of a model of two-nation. Matthias Herdegen, Principles of International Economic Law (Oxford University Press, 2013), 14; John H. Jackson, William J. Davey and Alan O. Sykes, *Legal Problems of International Economic Relations, Cases, Materials and Text*, 5th edition (St. Paul, MN: Thomson/West, 2008), 21; Paul A. Samuelson, *Economics*, 9th edition (McGraw Hill, 1973), 692.

efficiency and specialization.[246] Adam Smith thought that the source of national wealth was human labor, and hence, the concept of absolute advantage is based on the division of labor and specialization, corresponding to the beginning of the Industrial Revolution, during which time, specialization and division of labor developed not only in a factory and in a nation, but also at an international level in the global world for foreign trade.[247] Adam Smith advocated a policy of laisse-faire, i.e., as little government interference with the economic system as possible, with only a few exceptions such as national defense.[248]

The Ricardian Model based on comparative advantage explains that even if a country doesn't have an absolute disadvantage in producing any commodity, for instance, one country is more efficient and productive in producing all products, it can nevertheless gain from specialization and trade, as well as the whole world.[249] In the Ricardian Model, trade between two countries can benefit both countries if each country exports the goods in which it has a comparative advantage. A country has a comparative advantage in producing a commodity if the opportunity cost of producing that commodity in terms of other commodities is lower in that country than it is in the other country. The opportunity cost means "the cost of a commodity is the amount of a second commodity that must be given up to release just enough resources to produce on additional unit of the first commodity."[250] The Ricardian Model is based on trade in a one-factor world, and it used labor productivity as the measure of opportunity cost.[251] The difference in relative commodity prices between two nations is evidence of the difference in the productivity of labor among nations.[252] The labor productivity derives from the labor theory of value, which holds that the value or price

[246] Burton W. Folsom, ed. The Industrial Revolution and Free Trade (Foundation for Economic Education, 1996), 1-3; Adam Smith's *The Wealth of Nations* (1776).
[247] Folsom, *id*., 20-1; Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, Book IV, Ch.2, 414 (1776, repr. Modern Library edn., 1937); Dominick Salvatore, *International Economics*, fifth edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 26-30.
[248] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 29.
[249] Andreas F. Lowenfeld, *International Economic Law*, 2nd edition (Oxford University Press, 2008), 6.
[250] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 37.
[251] The classis work is David Ricardo, On the Principle of Political Economy, and Taxation (London: John Murray, 1817); Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 24-27.
[252] Krugman, *i.d.*, at 34; Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 109; John Stuart Mill, *The Principles of Political Economy: with some of their applications to social philosophy* (1848), Book III; Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 31, 33; Andreas F. Lowenfeld, *International Economic Law*, 2nd edition (Oxford University Press, 2008), 6; David Ricardo, *On the Principle of Political Economy, and Taxation* (London: John Murray, 1817).

of a commodity depends exclusively on the amount of labor needed for producing the commodity. However, labor is not the only factor of production, and labor is not homogeneous.[253]

The Heckscher-Ohlin (H-O) Model uses two nations, two commodities and two factors of production (labor and capital) (two-factor economy), with several assumptions.[254] The H-O Model examines the basis for comparative advantage and the effect that trade has on factor earnings in the two nations. According to the H-O theorem, international trade is largely based on differences in countries' resources.[255] "A nation will export the commodity whose production requires the intensive use of the nation's relatively abundant and cheap factor and import the commodity whose production requires the intensive use of the nation's relatively scarce and expensive factor."[256] Hence, it is beneficial trade in a sense that "the owners of a country's abundant factors gain from trade, but the owners of scarce factors lose. However, there are still gains from trade in the limited sense that the winners could compensate the losers, and everyone would be better off."[257] Trade acts as a substitute for the international mobility of factors of production in its effect on factor prices. [258] Relative factor prices should converge as a result of trade.[259] International trade causes real wages of labor to fall in a capital-abundant and labor scarce nation. In that case, the loss that trade causes to labor is less than the gain received by owners of capital.[260]

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[253] Salvatore, *i.d.*, at 36-37, 109. Under the model with constant opportunity costs, both nations specialize completely in production of the commodity of their comparative advantage, i.e., produce only that commodity. Under the model with increasing opportunity costs, which means that the nation must give up more and more of one commodity to release just enough resources to produce each additional unit of another commodity, there is incomplete specialization in production in both nations. Salvatore, *id.*, at 55 and 65-66. For more about the theory of comparative advantage, *see* Paul Krugman, "Is Free Trade Passe?" 1 *Economic Perspective* 131-144 (1987).

[254] Other assumptions such as both commodities are produced under constant returns to scale in both nations, incomplete specialization in production in both nations, tastes are equal in both nations can be found in Salvatore, *id*., at 110-111.

[255] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 80-81.

[256] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 118-9.

[257] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 104.

[258] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 127.

[259] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 91-93, 97.

[260] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 129. Redistribution policy of taxes on owners of capital and subsidies to labor can make both classes of factors of production benefit from international trade., Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 120.

(2) The New Trade Theories

Helpman, Krugman, Lancaster and others developed intra-industry trade models after 1979. They explain that intra-industry trade, which is an exchange of differentiated products of the same industry or broad product group, is based on economies of scale in production, and mutually beneficial trade can take place even when the two nations are identical in every respect.[261] Increasing returns (economies of scale) means that output grows proportionately more than the increase in inputs or factors of production.[262] The internal economies of scale means that the efficiency of a firm increased by expanding the size of the firm while external economies of scale means that the efficiency of firms increased by having a larger industry, even though each firm is the same size as before. Economies of scale coming from increasing returns, makes it advantageous for each country to specialize in the production of only a limited range of goods and services.[263] Hence, such international trade benefits both countries.

In a nutshell, the foregoing theories explain why nations trade and the effects of trade, and demonstrate that each nation gains from trade and world welfare increases as a whole. The comparative advantage theory predicts that each country gains from trade in different products, and the new trade theories based on economies of scale predict that each country gains from intra-industry trade, i.e., differentiated products in the same industry. Under both theories, world welfare increases from these trades. Each theory is applicable with some limitations. The comparative advantage theory (e.g., the H-O factor endowments model) is most appropriate to explain trade in completely different products, while the new trade theories based on economies of scale and differentiated products are most appropriate to explain intra-industry trade.[264] Thus, "while trade based on comparative advantage is likely to be larger when the difference in factor endowments among nations is greater, intra-industry trade is likely to be larger among economies of similar size and factor proportions."[265]

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[261] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 158.
[262] *Ibid.*
[263] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 137.
[264] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 171.
[265] Salvatore, *id*., at 68, 70. 162, 167.

2.3.2 International Trade Agreements Avoid Negative Externalities and Trade Wars

(1) Why Don't Countries Adopt Free Trade Policies

Trade is a non-zero-sum game in which each country will get benefits if trade is not restricted.[266] However, countries do erect trade barriers even though free trade is beneficial for each country and the whole world. One explanation is that nations tend use power to extract greater gains from trade at the expense of their trading partners, based on the terms of trade argument or the strategic trade argument.[267] The other explanation is political in that nations tend to have trade barriers regardless of whether it leads to the welfare of the nation increasing or decreasing, based on political economy theory.

a. The Terms of Trade Argument and the Strategic Trade Argument

In a perfect competition model, a nation may impose restrictive trade policies if its terms of trade improve, and hence extract greater gains from trade.[268] However, restrictive trade policies have protection costs or deadweight loss, which should be balanced against benefits obtained from improved terms of trade.[269] Hence, depending on the net effect of these two opposing forces (protection cost and terms of trade), its welfare can increase, decrease, or remain unchanged.[270] Taking tariffs as an example, when a large nation imposes a tariff, its terms of trade improve since a tariff by a large nation lowers foreign export prices, while the volume of trade declines. Nevertheless, a large nation can increase its welfare by imposing an optimum tariff, given that the gains from improved terms of trade outweigh its protection costs.[271] Literature also demonstrates

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[266] Non-zero-sum game means that both parties to the game can gain. *See* Jagdish Bhagwati, *The World Trading System at Risk* (Princeton University Press, 1991), 52.
[267] Jagdish Bhagwati, *The World Trading System at Risk* (Princeton University Press, 1991), 52.
[268] The terms of trade of a nation are the ratio of the price of its export commodity to the price of its import commodity. "A rise in the terms of trade increases a country's welfare." Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 93-94.
[269] For instance, the tariff results in a reduction in consumer surplus and an increase in producer surplus or rent, and directing resources from the nation's abundant factor (producing exportables) to the nation's scarce factor (producing importables) due to the fact that the domestic price of the importable commodity will rise by the amount of the tariff. This leads to inefficiencies by distorting the incentives of producers and consumers, i.e., the protection cost or deadweight loss. Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 232-235, 225-226; Consumer surplus means the difference between what consumers would be willing to pay for each unit of the commodity and what they actually pay for that unit. Salvatore, *id.*, at 224.
[270] Salvatore, *id.*, at 236-7.
[271] The optimum tariff is that rate of tariff that maximizes the net benefit resulting from the improvement in the nation's terms of trade against the negative effect resulting from reduction in the volume of trade. Paul R. Krugman, Maurice

the effects of import quotas,[272] voluntary export restraint,[273] and export taxes[274] on the welfare of the nation imposing these measures, as shown below in Table 10.

Table 10 Effects of Trade Policies

Note: under perfect competition model: the world market and domestic market are all perfect competition) [275]

	Tariff	Export subsidy	Import quota	Voluntary export restraint
Producer surplus	Increases	Increases	Increases	Increases
Consumer surplus	Falls	Falls	Falls	Falls
Government revenue	Increases	Falls	No change (rents to license holders)	No change (rents to foreigners)
Overall national welfare (terms of trade needs to be considered against the protection costs)	Ambiguous (falls for small country)	Falls	Ambiguous (falls for small country)	Falls

In an imperfect competition model with increasing returns, countries choose protectionist policies to increase national welfare at the expense of their trading partners, according to the strategic trade argument.[276] The economics examines the effects of subsidization of domestic firms, subsidization of the exports of these firms, and imposing tariffs on imports from the foreign rivals of domestic firms, in an imperfect competition model, where there is monopoly or oligopolies domestically, and imperfect competition in the world market with oligopolistic competition among domestic and

Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 225; Dominick Salvatore (edited), *Protectionism and World Welfare* (Cambridge England: Cambridge University Press, 1993), 32-3.

[272] Salvatore, *id*., at 258-30.

[273] Voluntary export restraints have equivalent economic effects of import quotas, except that they are administered by the exporting country, and so the revenue effect or monopoly profits are captured by foreign exporters. *See* Salvatore, *id*., at 260-261. VER producers a loss for the importing country, *see* Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 208.

[274] Export taxes create government revenue, while depressing domestic prices, reducing output and increasing consumption. If the country is large enough to have some market power, the world price will typically rise and foreigners will bear some of the burden of the tax. It may increase national welfare provided that the tax is kept sufficiently small. *See* Ryan Scholefield and James Gaisford, "Export Taxes: How They Work and Why They Are Used," in *Handbook on International Trade Policy*, eds., William A. Kerr and James D. Gaisford (Edward Elgar Press, 2007), 237.

[275] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 211 (table 9-1).

[276] Imperfect competition is where firms can influence the prices of their products and they can sell more only by reducing their price. This type of competition is an inevitable outcome when there are economies of scale at the level of the firm. Oligopoly is where several firms are large enough to affect prices, but none has an uncontested monopoly. *See* Krugman, *id*., at156, 159.

foreign firms in international markets. For instance, export subsidy benefits the home firm at the expense of the foreign firm, confirming to the Brander-Spencer model based on the strategic trade argument.[277] The national welfare of the subsidizing nation will increase as long as benefits can outweigh the cost of subsidies to the government.

b. Political Economy Theory (Public Choice Theory)

Political economy theory explains why a country restricts trade regardless of its national welfare increasing or decreasing. Mancur Olson pointed out that "political activity on behalf of a group is a public good" that benefits all members of the group, not just the individual who performs the activity, and policies that impose large losses in total, but small losses on any individual, may not face any effective opposition.[278] Therefore, the problem of free riders and a collective action occurs in political arena insofar as it is in the interests of the group as a whole to press for favorable policies, rather than an individual' interest to do so.[279] Well-organized and financed special interest groups can overcome the problem of collective action and free riders, and are more likely to lobby for policies that favor them and impose costs on mass individuals, such as export subsidies that favor domestic producers and disadvantage domestic consumers, who are not well-organized. In addition, public choice theory suggests that political officials pursue their self-interests, such as maximizing chances of reelection and campaign contributions, rather than the welfare of voters.[280] Hence, politicians can trade off policies favoring special interest groups at the expense of the national welfare as a whole for political contributions from them.[281] This theory explains why exporting industries in the exporting country and the producing industries in the importing country are better organized and better financed than domestic consumers in lobbying government for giving export subsidies and imposing countervailing duties.[282]

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[277] Jonathan Eaton & Gene M. Grossman, Optimal Trade and Industrial Policy under Oligopoly, in Jagdish Bhagwati, International Trade, 2nd edition (1987),161-79; Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 294-296.

[278] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 229-32; Mancur Olson, *The Logic of Collective Action: Public Goods and The Theory of Groups* (Cambridge, MA: Harvard University Press, 1965), 9-22.

[279] Olson, *id.*, at 11.

[280] Gene Grossman and Elhanan Helpman, "Protection for Sale," 84(4) *The American Economic Review* (Sept. 1994): 833-850, 848; Paul Krugman, "Is Free Trade Passe?" 1 *Economic Perspective* (1987): 131-144, 141.

[281] Grossman, *id*., 848.

[282] For more about the lobbying activities, which are referred as unproductive profit-seeking, *see* Jagdish Bhagwati, *Writing on International Economics*, ed. by V. M. Balasubramanyam, (1997), 8-9, 134-51.

(2) International Trade Agreements Are Needed and Beneficial

The above section explains that nations rarely voluntarily or unilaterally adopt free trade policies. Hence, international trade agreements are needed: i) to secure gains from trade even if unilateral protection doesn't adversely affect trading partners while world welfare decreases, or ii) to avoid negative externalities of unilateral protectionist measures, or iii) to avoid a trade war, which makes world welfare worse off.[283]

International trade agreements are needed to secure gains from trade and avoid situations where although there are no negative externalities to trading partners, the welfare of the country imposing restrictive trade policies declines and, consequently, so does overall world welfare.[284] For instance, if a small country, which cannot affect world prices, imposes a tariff, it will reduce its welfare as well as world welfare, since there are no gains from its terms of trade in light of its inability to drive down foreign export prices. This occurs because tariffs reduce consumer surplus and increase producer surplus or rent, but incur the protection cost or deadweight loss since tariffs distort incentives of producers and consumer, which is an efficiency loss.[285]

International trade agreements are needed to avoid negative externalities caused by unilateral behavior of nations. Negative externality means that a unilateral measure by a nation may negatively affect others, leading to inefficiency in the absence of international cooperation.[286] For

[283] With respect to the theory of trade agreements, except for the traditional economic approach, the other one is the political-economy approach, that the government faces political constraints when setting trade policy, (political motivations); and another one is the commitment approach that stresses the difficulty governments may face in making policy commitments to the private sector, in a sense that trade agreements can help governments stick to the agreements when facing pressure from domestic interest groups asking for protection. *See* Kyle Bagwell and Robert W. Staiger, *The Economics of the World Trading System* (The MIT, 2002), 7, 13-42, 165.
[284] Jagdish Bhagwati, *The World Trading System at Risk* (Princeton University Press, 1991), 32-3.
[285] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 201-202. The Stolper-Samuelson Theorem explains that imposition of a tariff increases the price of a commodity, and raises the return of earnings of the factor used intensively in the production of the commodity. Thus, the real return to the nation's scarce factor of production will rise with the imposition of a tariff. A small nation as a whole is harmed by the tariff, while the nation's scarce factor benefits at the expense of the nation's abundant factor. The latter is larger than the former. *See* Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 225-6, 232-236.
[286] Eric Poser and Alan Sykes, *Economic Foundations of International Law* (The Belknap Press of Harvard University Press, 2013), 13-14.

instance, negative externalities come from countries' pursuit of terms-of-trade gains, or strategic trade policies.[287]

International trade agreements are needed to avoid a trade war, in which situation world welfare would be reduced.[288] The situation faced by governments is similar to the prisoner's dilemma in the game theory. (Shown in the Table 11 below). Literature exists analyzing the model of two countries with two policy options: protection or free trade. Each government would choose protection if it could take the other country's policy as given. Even though each government acting individually would be better off with protection, they would be even better off if both choose free trade which has mutual gains, and they would be worse off if both refrain from free trade since there is a trade war.[289] In the real world, countries are free to determine economic relations with other countries under customary international law. Hence, a need arises to coordinate through international agreements to refrain from protectionism, to address the prisoner dilemma problem and to avoid trade wars.[290] For instance, even if a nation gains from a tariff, the terms-of-trade benefits to it represents a loss to its trading partners,[291] who are likely to retaliate with a tariff of their own. In the end, both nations are likely to lose.[292] The retaliation of trading partners will reduce the volume of trade still further. They may engage in a trade war and end up losing the gains from trade.[293]

[287] Kyle Bagwell and Robert W. Staiger, *The Economics of the World Trading System* (The MIT, 2002), 16-8, 135.
[288] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 116-117.
[289] Kyle Bagwell and Robert W. Staiger, *The Economics of the World Trading System* (The MIT, 2002), 133-5.
[290] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 235-6; John H. Jackson, William J. Davey and Alan O. Sykes, *Legal Problems of International Economic Relations, Cases, Materials and Text*, 5th edition (St. Paul, MN: Thomson/West, 2008), 51; Paul Krugman, "Is Free Trade Passe?" 1 *Economic Perspective* (1987):131-144, 141. Matthias Herdegen, *Principles of International Economic Law* (Oxford University Press, 2013), 13.
[291] The trading partner's welfare declines since it has a lower volume of trade and deteriorating terms of trade.
[292] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 244-6.
[293] Id., at 238-9; Although one country's protection doesn't justify another's, nations retaliate in reality. "Protection by a trading partner lowers the real income both of the partner and at home. The microeconomic effects of trade barriers are argued to be welfare losses and departures from Pareto optimality." *See* Dominick Salvatore (edited), *Protectionism and World Welfare* (Cambridge England: Cambridge University Press, 1993), 18-9, 67, 99.

Table 11 Prisoner Dilemma in Trade

Note: taking the U.S. and China as an example[294]

U.S. \ China	Free trade	Protection
Free trade	10 / 10	-10 / 20
Protection	20 / -10	-5 / -5

2.3.3 The Grants of Advantages to SOEs Reduce World Welfare and Undermine International Trade Agreements

(1) Grants of Financial Advantages and Regulatory Advantages to SOEs and Behavior Afterwards

a. World Welfare Effects

a) In a Perfect Competitive Market Model

The welfare of subsidizing nation decreases **more** in situation of giving financial advantages to SOEs

Some literature demonstrates that under the condition of a perfectly competitive market in international trade, subsidies--no matter whether they are export subsidies or production subsidies--are inefficient and welfare diminishing regardless whether the country granting subsidies is a large or small one, as shown in the Table 12 below.[295] The subsidizing nations all suffer from the deadweight loss, which is an efficiency loss due to the distortion of incentives to consume and produce.

[294] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 235 (table 10-3 about the problem of trade warfare).

[295] In a perfect market closed to international trade, production subsidies expand output, reduce the price, and create a welfare loss since resources are allocated inefficiently. *See* WTO, *World Trade Report 2006: Exploring the Links between Subsidies, Trade and the WTO* (WTO, 2006), 55.

Table 12 The Effects of Subsidies in a Perfect Competitive Market in International Trade

	The size of subsidizing country	Government revenue	**Domestic output**	Domestic price (if re-imports are prevented)	**World price**	Exports	Imports	Subsidizing nation's welfare
Export subsidies (granted to export competing industry)	Small	Fall	**Increase**	Increase	**Unchanged**	Increase		Loss (for sure)
	Large	Fall	**Increase**	Increase	**Fall**	Increase		Loss
Production subsidies (granted to import competing subsidies)	Small	Fall	**Increase**	Unchanged (=world price)	**Unchanged**	Increase	Fall	Loss (for sure)
	Large	Fall	**Increase**	Fall	**Fall**	Increase		Loss

(Note: a small country is a price taker while a large country can affect world prices.)

In a perfect competitive market, in regard to export subsidies granted by a small country, it has the effect of expanding output and exports. An export subsidy gives producers an incentive to export given that it will be more profitable to sell abroad than at home unless the price at home is higher, leading to domestic prices increasing.[296] The higher price of the commodity in the domestic markets benefits producers while it harms consumers in the subsidizing nation. Overall, the domestic producers gain less than the sum of the loss of domestic consumers and the cost of the subsidy to the subsidizing nation's taxpayers, and hence, the subsidizing nation incurs a protection cost or deadweight loss as a result of the export subsidies. This is a loss resulting from the export subsidies' distorting effects on incentives of consumers and producers. The same analysis applies to the case of a large country granting export subsidies, incurring a deadweight loss (protection cost).

In a perfect competitive market, production subsidies, particularly market price supports that keep domestic prices above world price levels, provide incentives for producers to supply more and

[296] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 203-204.

consumers to consume less. This distortion in production, i.e., to produce more, and consumption, i.e., to consume less, leads to a loss in economic welfare.[297] It is true for both a large country and a small country. With respect to a small country granting production subsidies, such as subsidies to reduce the costs of domestic producers, and subsidies to increase output of domestic production, other than market price supports, government revenue falls due to the costs of subsidies. Domestic output increases. Domestic price, which is fixed to the world price, remains unchanged, since the world prices are unaffected. The result is an expansion in domestic output at the expense of imports. A welfare loss occurs since the additional domestic output would cost less to source from the world market. Hence, domestic output adjusts in response to the subsidy intervention rather than the world price, leading to inefficiencies.[298] With respect to a large country granting production subsidies other than market price supports, they increase domestic production, or reduce the costs of domestic producers. In light of a large country's capacity to affect world prices, production subsidies in this regard cause the world price to fall. Welfare effects for the exporter country are an increase in consumer surplus and an increase in producer surplus, but these increases are not large enough to cover the cost to taxpayers of the production subsidy.[299] Therefore, it is a loss to the subsidizing nation's welfare.

The above analysis, based on POEs, demonstrates that in a perfect competitive market, welfare of the subsidizing nation decreases. It is also applicable to the case of granting advantages to SOEs. What's more, the welfare of subsidizing nation decreases **more** in situation of giving financial advantages to SOEs due to their behavior afterwards in light of their objectives of revenue maximization and expansion of scale. First, SOEs are more likely to expand output disproportionally than POEs after receiving subsidies, leading to more efficiency loss (deadweight loss) due to much more distortion of incentives to consume and produce. This occurs because the objectives of SOEs and the incentives of managers of SOEs are less likely to be profits maximization, but rather expanding the size of the operations, and the scale and scope of their

[297] Karl D. Meilke and John Cranfield, "Production Subsidies," in *Handbook on International Trade Policy*, eds., William A. Kerr and James D. Gaisford (Edward Elgar Press, 2007), 292.
[298] WTO, *World Trade Report 2006: Exploring the links between subsidies, trade and the WTO* (WTO, 2006), 56.
[299] Karl D. Meilke and John Cranfield, "Production Subsidies," in *Handbook on International Trade Policy*, eds., William A. Kerr and James D. Gaisford (Edward Elgar Press, 2007), 292-297.

activities.[300] Second, given that promotions of SOEs' managers are related more to the size of the SOE and SOEs discount the costs of expanding output, SOEs will be more likely to set below-costs prices after receiving subsidies in order to expand the size of their operations, and hence drive efficient competitors out of the market, particularly if customer demand for some products is sensitive to price.[301]

The welfare of the importing nation will decrease if financial advantages are granted to SOEs by a large country

In a perfect competitive market, the welfare of the importing nation will decline as a result of a decrease in producer surplus or remain unchanged facing export subsidies or production subsidies given by a small country. In a perfect competitive market, the welfare of the importing nation will increase facing export subsidies or production subsidies given by a large country. This is because the extent to which subsidies distort international markets depends on whether the subsidizer is large country with respect to its ability to affect world prices.[302] With respect to a large country granting export subsidies, they drive down world prices. Consumers in foreign countries benefit from lower world prices, foreign producers are net losers since they have to compete with the lower prices. Overall, however, the importing country is better off, since the increased benefit to consumers offsets the loss to the producers. With respect to a large country granting production subsidies, there is a reduction in the world price. Producers of competing products will have to compete against the subsidized exporters at the lower price, whereas consumers of the cheaper imports will benefit. Therefore, countries that are net importers of the subsidized product could gain overall from subsidies.[303]

However, in a situation of subsidies granted by a large country to SOEs, the welfare of the importing nation may not increase, but rather decrease in the long term. As compared to POEs,

[300] "SOEs would focus more on revenues instead of profit, and revenue often serves as a convenient proxy for scale." *See* David E. M. Sappington and J. Gregory Sidak, "Anticompetitive Behavior by State-Owned Enterprises: Incentives and Capabilities," in *Competing with the Government, Anticompetitive Behavior and Public Enterprises*, eds., Richard R. Geddes (Hoover Institution Press, 2004), 7.
[301] It is more likely to occur if the SOEs emphasize revenue or if customer demand for some of their products is sensitive to price. *See* David E. M. Sappington, *id*., at 8.
[302] James Rude, "Direct and Indirect Export Subsidies," in *Handbook on International Trade Policy*, eds., William A. Kerr and James D. Gaisford (UK: Edward Elgar Press, 2007), 282-291.
[303] WTO, *World Trade Report 2006: Exploring the Links between Subsidies, Trade and the WTO* (WTO, 2006), 5.

SOEs after receiving subsidies, are more likely to succeed in predatory pricing, obtaining market shares abroad, and extracting monopoly rent by raising prices. First, governments have control over SOEs in the decision-making of these SOEs after they obtain the dominant market power in the importing country. "A single relatively powerful economic national government can more easily 'succeed'", thus, predatory intent is likely to be achieved.[304] Second, SOEs, after receiving subsidies, have more incentives to set below-costs prices, or predatory prices to expand the size of operation, which is their primarily objective internally.[305] To that end, the welfare of the importing country would decrease in the long term.

World Welfare will not likely to increase if SOEs receive financial advantages from a large country

World welfare will decrease in cases where subsidies are granted by a small country to POEs. World welfare will decrease more in cases where subsidies granted by a small country to SOEs. However, it is uncertain from the current literature whether overall world efficiency/welfare increases or decreases in the case of a large country granting export subsidies or production subsidies.[306] Nevertheless, the extent of the above uncertainty decreases in cases of granting advantages to SOEs by a large country. (shown in the Table 13 below).

[304] John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd edition (Cambridge, MA: MIT Press, 1997), 283.
[305] David E. M. Sappington and J. Gregory Sidak, "Anticompetitive Behavior by State-Owned Enterprises: Incentives and Capabilities," in *Competing with the Government, Anticompetitive Behavior and Public Enterprises*, eds., Richard R. Geddes (Hoover Institution Press, 2004), 8.
[306] Alan Sykes, "The Questionable Case for Subsidies Regulation: A Comparative Perspective," Law and Economics Research Paper Series Paper No. 380; *see* Karl D. Meilke and John Cranfield, "Production Subsidies," in Handbook on International Trade Policy, eds., William A. Kerr and James D. Gaisford (Edward Elgar Press, 2007), 292-301; John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd edition (Cambridge, MA: MIT Press, 1997) To the extent that an export subsidy not only transfers production from one company to another but increases overall production, there might be a global benefit. *See* Andrew Green and Michael Trebilcock, "The Enduring Problem of World Trade Organization Export Subsidies Rules," in *Law and Economics of Contingent Protection in International Trade* Kyle Bagwell, George Bermann and Petros Mavroidis eds. (Cambridge University Press, 2010), 116-171.

Table 13 Welfare Effects of Giving Advantages to POEs and SOEs in A Perfect Competitive Market

In a perfect competitive market	Welfare of subsidizing nation	Welfare of importing nation	World welfare
Give advantages to POEs by a small country	Decrease	(Decrease or unchanged)	Decrease
Give advantages to **POEs** *by a large country*	Decrease	Increase	Not sure (uncertainty)
Give advantages to SOEs by a small country	Decrease more	(Decrease or unchanged)	Decrease more
Give advantages to **SOEs** by *a large country*	Decrease more	Not likely to increase	More likely to decrease (uncertainty is reduced)

b) In an Imperfect Competitive Market Model

In an imperfect competition model with excess returns, according to the strategic trade argument,[307] governments may use export subsidies to shift these excess returns from foreign to domestic firms, raising the profits of domestic firms by more than the amount of the subsidy. To that end, governments adopt strategic trade policies to shift excess returns from foreign to domestic firms. However, these export subsidies raise national income at the expense of trading partners, generating negative externalities, which will invoke retaliation and lead to competitive subsidization/trade wars. In addition, excessive subsidization or over subsidization is common empirically and theoretically in light of the domestic political process and structure.[308] Excessive subsidization is more likely to face retaliation from trading partners.[309] To that end, every nation will be worse off, and so will world welfare. (See Table 14 below.)

In the situation where SOEs are present in an imperfect competitive market, first, due to SOEs' strong lobbing power in light of their relationship with governments, governments are more likely

[307] The classic example of strategic trade argument is the Brander-Spencer analysis with the example of Boeing and Airbus. There were new developments in international trade theory since 1970s, emphasizing increasing returns and imperfect competition, The new view of international trade holds that trade is to an important degree driven by economies of scale rather than comparative advantage, and that international markets are typically imperfectly competitive, *see* Paul Krugman, "Is Free Trade Passe?" 1 *Economic Perspective* (1987): 131-144, 132.
[308] Warren F. Schwartz & Eugene W. Harper, Jr., The Regulation of Subsidies Affecting International Trade 70 *Mich.L.Rev.* (1972): 831.
[309] Gary C. Hufbauer & Joanna Shelton Erb, Subsidies in International Trade 5–6 (1984), Institute for International Economics. *See also* D. Wallace, F. Loftus and V. Krikorian, *Interface Three: Legal Treatment of Domestic Subsidies* (Washington, D.C.: International Law Institute, 1984).

to adopt strategic trade policies, for instance, give subsidies to SOEs who are the monopolies/oligopolies as opposed to giving subsidies to POEs, who are monopolies/oligopolies in order to shift excess returns from foreign firms to SOEs. Second, SOEs are more likely to receive excessive advantages than POEs in the imperfect competition market due to SOEs' stronger lobbying power. Strategic trade policies adopted by governments benefiting SOEs, particularly excessive advantages, may invoke retaliation easily based on evidence found that in the situation of financial advantages granted to SOEs, more complaints would arise from foreign companies, complaining to their governments asking for certain actions, which may include retaliatory subsidization.[310] Third, the strategic trade policies only work under certain conditions, including that the sector involved should have increasing returns and profits above the normal return, imperfect competition, restriction on market entry by other domestic players, economics of scale in the industries and so on.[311] If any condition is missing, it is less likely to shift and enjoy excess returns. [312] Conditions mentioned above are typical for SOEs. POEs may be less inclined to enter new markets, or to expand their sales in existing markets practically, if they know that their foreign rivals are SOEs. Last, it appears that even if conditions required by the strategic trade theory are not met, governments nevertheless create conditions for SOEs through regulatory measures dictating market structure, granting monopolies and exclusive rights to SOEs, and restricting market entry into some industries to guarantee SOEs' control over the market. Governments are more likely to create these conditions so as to adopt and make effective strategic trade policies in situation where SOEs are present.

[310] European Chamber, "European Business in China: Position Paper (2015/2016)," European Union Chamber of Commerce in China (2016). Kenneth W. Dam, *The GATT: Law and International Economic Organization* (Chicago: University of Chicago, 1977), 136; Andreas F. Lowenfeld, International Economic Law, 2nd edition (Oxford University Press, 2008), 216.

[311] James Brander, "Rationales for Strategic Trade and Industrial Policy," in *Strategic Trade Policy and the New International Economics*, ed. Paul Krugman (Cambridge, MA: MIT Press, 1986).

[312] Katherine Baylis, "Unfair Subsidies & Countervailing Duties," in *Handbook on International Trade Policy*, eds., William A. Kerr and James D. Gaisford (Edward Elgar Press, 2007). Krugman, "Introduction: New Thinking about Trade Policy," in in *Strategic Trade Policy and the New International Economics*, ed. Paul Krugman (Cambridge, MA: MIT Press, 1986).

Table 14 Welfare Effects of Giving Advantages to POEs and SOEs in an Imperfect Competitive Market

In an imperfect competitive market	Welfare of subsidizing nation	Welfare of importing nation	World welfare
Give financial advantages to POEs	Increase at the expense of trading partners	Decrease	Decrease as a result of trade wars
Give financial advantages to SOEs➔ more likely to have strategic trade policies	Increase at the expense of trading partners	Decrease	Decrease as a result of trade wars (more likely to invoke retaliation)

In addition, granting advantages to SOEs modifies the comparative advantage in the H-O model with perfect competition. The theory of comparative advantage assumes market-determined comparative advantage, and hence advocates that government should refrain from intervening in the market. However, in reality, almost all governmental measures affect resource allocation and hence affect the factor endowments that make up comparative advantage.[313] Any advantage granted by governments to SOEs solely out of state ownership alters comparative advantage in a sense that the comparative advantage is distorted, created, or shaped by governmental grants.[314] This alteration of comparative advantage has greater distorting effects when advantages are granted to SOEs that might not survive on the basis of market forces alone.[315] Models suggest that SOEs are not efficient performers, and empirical evidence shows that the performance of SOEs is 25% less efficient than that of POEs in terms of costs.[316] Hence, grants of advantages to SOEs distort efficient resource allocation by allowing inefficient SOEs to continue production in an inefficient way and driving competitive efficient producers out of the market.[317] Furthermore, a disagreement arises over the possibility of distinguishing efficient grants of advantages from inefficient grants of advantages,[318] given the difficulty of calculating the sum of producer and

[313] Dominick Salvatore (edited), *Protectionism and World Welfare* (Cambridge England: Cambridge University Press, 1993), 39-40; John H. Jackson, William J. Davey and Alan O. Sykes, *Legal Problems of International Economic Relations, Cases, Materials and Text*, 5th edition (St. Paul, MN: Thomson/West, 2008), 15-20; Andreas F. Lowenfeld, *International Economic Law*, 2nd edition (Oxford University Press, 2008), 8.
[314] Salvatore, *id*., at 39-40.
[315] Andreas F. Lowenfeld, *International Economic Law*, 2nd edition (Oxford University Press, 2008), 216.
[316] Stephen J.K. Walters, *Enterprises, Government and the Public* (New York: McGraw-Hill Book, 1993), 104.
[317] Coase, The Problem of Social Cost, 3 (1) *J. Law & Econ.* (1960). Resources will be employed in producing the subsidized goods rather than other goods of greater real value. *See* Warren Schwartz and Eugene Harper, The Regulation of Subsidies Affecting International Trade, 70 *Mich. L. Rev.* (1972): 831, 840.
[318] Alan, Sykes, "The Questionable Case for Subsidies Regulation: A Comparative Perspective, Law and Economics," Research Paper Series Paper No. 380.

consumer surplus, and government revenue.[319] There is also overlap between consumers and firms/producers.[320] Nonetheless, the possibility of not being able to distinguish efficient grants of advantages from non-efficient grants of advantages cannot be a justification for not disciplining grants of advantages to SOEs in the first place.

c) Empirical Evidence

Here are some empirical findings in literature. With respect to welfare, I try to find the effect of giving advantages to SOEs as compared to POEs. I take subsidies as an example in the category of financial advantages. Theoretically, first, I need to demonstrate that subsidies given to POEs reduce world welfare. Secondly, I need to demonstrate that subsidies given to SOEs reduce world welfare in a greater degree.

However, literature and empirical evidence are not complete. First, the above analysis is more theoretically about the welfare effects of subsidies given to all enterprises, or assuming POEs, in a perfect market and an imperfect market. However, the empirical evidence is inconsistent.

With respect to the relationship between subsidies and exports, it is generally positive related.[321] However, the empirical evidence on the relationship remains ambiguous. One study conducted a panel data empirical analysis over 1990–2011 for 140 countries to understand the relationship between their overall budgetary subsidies and aggregate merchandise export inclination. It finds that overall budgetary supports in all countries, irrespective of their income level, are positively related with aggregate merchandise export expressed as a percentage of GDP.[322] One empirical piece of literature examined export policies in Turkey during the period from the late 1970s to the

[319] John H. Jackson, William J. Davey and Alan O. Sykes, *Legal Problems of International Economic Relations, Cases, Materials and Text*, 5th edition (St. Paul, MN: Thomson/West, 2008), 22; John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd edition (Cambridge, MA: MIT Press, 1997), 282.
[320] Consumers and taxpayers are one and the same subject. Consumers may also be the employees of companies. Consumers may also own a firm through pension and investment funds.
[321] Steven M. Suranovic, International Trade Theory and Policy, chapter 90-27, available at http://internationalecon.com/Trade/Tch90/T90-27.php (last updated on Aug. 20, 2004)
[322] Sacchidananda Mukherjee, Chakraborty Debashis & Chaisse Julien, "Influence of Subsidies on Exports Empirical Estimates, Policy Evidences and Regulatory Prospects," available from: https://www.researchgate.net/publication/262642762_Influence_of_Subsidies_on_Exports_Empirical_Estimates_Policy_Evidences_and_Regulatory_Prospects [accessed May 31, 2017].

mid-1990s. It found that in the short term, export subsidies contribute significantly to the explanation of export supply with correct signs. But in the long term, export subsidies turn out to have a negative effect on export supply.[323] Additional examples can also be found, particularly regarding China's increased exports correlating to its export subsidies. One research finds that production subsidies leads to an increase in the level of exports in China.[324] Another piece of literature sheds light upon the causal nexus between production-related subsidies and exports by using a Portuguese longitudinal database (1996-2003). Its empirical result seems to prove the theoretical predictions: subsidies generate a rise in the wage premium of exporters and an increase in the relative size of the export sector, even if there is no impact of subsidies is found in the capacity of transforming domestic firms into new exporters.[325]

Now imagine a situation in which we examine the welfare effects of trade among three countries. Country *A* is an exporter, and the exports are subsidized by the central government. Country *B* imports *A*'s exports. Country *C* also exports to *B* but those exports to *B* (and other countries) are *not* subsidized. With respect to the welfare of a third country like *C*, one empirical report is about the effects of European farm export subsidies on the Australian economy, which also exports wheat and dairy. It finds that i) consumers in Australia (Country *C*) will be hit by rising inflation and rising interest rates; ii) wheat and dairy farmers will be forced off the land; iii) commodity prices would be slashed; iv) GDP would fall; v) exchange rates would fall due to lower export revenue; and vi) unemployment rises.[326] Therefore, the welfare of Australia, as a third country that also exports, decreases.

With respect to the welfare of the exporting country, the targeted importing country, and non-targeted importers, one empirical report finds that use of export subsidies in the world wheat market has caused substantial changes in the behavior of importing and exporting countries. The

[323] It is explained that the temporary positive effect of subsidies becomes negative in the long-run due to uncertainty not only in exchange rate and demand policies but also in the subsidies themselves. *See* E. Uygur, *Export policies and export performance: The case of turkey*, Federal Reserve Bank of St Louis (1997), retrieved from https://search.proquest.com/docview/1698307047?accountid=14553

[324] Sourafel Girma et al., "Can Production Subsidies Explain China's Export Performance?," *VoxEU.org*, July 8, 2008, http://voxeu.org/article/chinese-exports-and-chinese-subsidies-firm-level-evidence.

[325] O. Afonso & A. Silva, "Non-scale endogenous growth effects of subsidies for exporters," 29 (4) *Economic Modelling* (July 2012), 1248-1257.

[326] "EC policy prompts warning," *The Advertiser*, LexisNexis Academic. Web. Date Accessed: 2017/05/31.

analysis uses three exporting countries and two importing countries. Exporting countries lose welfare and subsidized importing countries gain welfare when both targeted and general export subsidies are used. Non-targeted importers welfare remains constant when targeted export subsidies are used because they are ineligible for export subsidies.[327] One paper has analyzed the impact of the U.S. subsidy policy for soybeans on Brazilian production and trade of soybean and soybean products, and finds that this subsidy is causing damage to Brazilian producers and exporters.[328]

There are no theories directly talking about the possibility that subsidies given to SOEs cause net damages to world welfare. Even the extensive literature on strategic trade policy ignores state ownership and typically proceeds from the assumption that firms are profit-maximizing oligopolies. Empirical evidence is lacking in this regard, and even the theoretical relationship between subsidized exports and world welfare is unclear.

Nevertheless, there exists some academic literature about the relationship among government shares, welfare, and trade policies. The literature examined the effects of the degree of state ownership on optimal trade policy, which covers domestic exports, export taxes, and tariffs that apply to all types of enterprises;[329] one piece discusses the influence of state ownership on optimal export taxes, and demonstrates that the degree of state ownership affects neither the level of socially optimal export levels nor welfare nor the level of optimal trade taxes.[330] One piece examined the effects of privatization on social welfare of the nation that undergoes privatization. Other literature relates to the negative effects of state shares or subsidies on the performance of the enterprises with respect to efficiency and incentives, although some exceptions are in existence.

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[327] N. D. Clyde, *The effects of export subsidies in the world wheat market* (1993). Available from ProQuest Dissertations & Theses Full Text: Social Sciences; ProQuest Dissertations & Theses Global: Social Sciences. (304061967). Retrieved from https://search.proquest.com/docview/304061967?accountid=14553

[328] Antônio Salazar P. Brandao & Elcyon Caiado Rocha Lima, "Impacts of the U.S. Subsidy to Soybeans on World Prices, Production and Exports" 44(4) *Rev. Econ. Sociol. Rural* (2006), 631-676. Available from: <http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-20032006000400002&lng=en&nrm=iso>. ISSN 0103-2003. http://dx.doi.org/10.1590/S0103-20032006000400002.

[329] Ngo Van Long & Frank Stähler, "Trade Policy and Mixed Enterprises," 42(2) *Canadian Journal of Economics* (3 Apr. 2009): 590-614.

[330] N. Long & F. Staehler, "How Does State Ownership Affect Optimal Export Taxes?" 6(37) *Economic Bulletin* (15 Sept. 2008).

One article talked about the effects of subsidies given to a mixed oligopoly, and found that subsidies given to a mixed oligopoly contribute to overall efficiency.[331]

In addition, there exists extensive literature about the difference between POEs and SOEs. One survey done by interviews reported that the disadvantages to an SOE of following all the objectives that governmental policies impose on the SOE may be greater than whatever advantages (including those of governmental subsidization of exports) being an SOE may confer.[332]

Therefore, I try to make an analogy and utilize relevant pieces of literature, to fill the vacuum regarding effects of subsidies given to SOEs on world welfare. Based on differences among POEs and SOEs in all aspects, the literature and empirical evidence regarding POEs receiving subsidies may apply partially if not completely to situations where SOEs are given subsidies. I made inference from theories regarding POEs receiving advantages to SOEs receiving advantages as in the economic section above. However, this is not perfect because the method is analogy by comparison and contrast, and inference. Furthermore, empirical evidence is either lacking or scattered or contrary to one another.

Further study will be needed to fill the vacuum regarding welfare effects of subsidies given to SOEs as opposed to POEs.

b. Undermine International Trade Agreements

Grants of production subsidies to the import-competing industries are similar to tariffs, hence, may undermine tariffs commitments made in international trade agreements. Previous literature demonstrates that grants of financial advantages to import-competing goods that are subject to tariff commitments, and grants of advantages to services, which are subject to specific commitments, can defeat the commitments already made under the WTO Agreements since the effects of these advantages are similar to tariffs. The import-competing firms that receive

[331] White, M.D. "Mixed oligopoly, privatization and subsidization" 53(2) *Economics Letters* (Nov. 1996), 189-195.
[332] Renato Mazzolini, "Are State-Owned Enterprises Unfair Competition?" 23(2) *California Management Review* (winter 1980), 20-28.

advantages can lower marginal costs, and hence tend to reduce their prices, resulting in imported goods lowering their prices in order to remain competitive.[333] These advantages affect the imported goods to the extent that imports may be reduced due to inability to reduce prices of imported goods as opposed to subsidized domestic goods, having the equivalent effects of tariffs.[334] With respect to export subsidies, they may pose a threat to negotiated market access agreements to the extent that an importing nation may fear the remaining level of protection will be overcome by future export subsidies.[335]

The analysis above is applicable to grants of advantages to SOEs in import-competing industries or exporting industries, in a sense that they defeat market access commitments. In addition, SOEs are more likely to receive more advantages with less transparency in various forms, making it more easy to circumvent commitments countries made in international trade agreements. Behavior of SOEs after receiving advantages are more likely to circumvent other obligations countries made such as the non-discriminatory obligations, in light of the tendency of SOEs' behavior to be influenced by governments.

(2) Grants of Monopolies or Exclusive Rights to SOEs and Behavior Afterwards

a. World Welfare Effects

General welfare reducing effects of monopolies or exclusive rights

Literature demonstrates that in general monopolies or exclusive rights put restrictions on the free movement of factors of production, restrictions on the competition for factors of production, and restrictions on the entry.[336] "The efficiency consequences of monopoly is deadweight loss and

[333] Alan O. Sykes, "The Limited Economic Case for Subsidies Regulation," E15Initiative, Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, 2015. www.e15initiative.org/
[334] John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd edition (Cambridge, MA: MIT Press, 1997); Karl D. Meilke and John Cranfield, "Production Subsidies," in *Handbook on International Trade Policy*, eds., William A. Kerr and James D. Gaisford (Edward Elgar Press, 2007), 294.
[335] The weaknesses of these arguments are also discussed. *See* Alan O. Sykes, "The Limited Economic Case for Subsidies Regulation," E15Initiative, Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, 2015.
[336] Donald B. Billings and Ellis W. Lamborn, "Free Trade, Freedom of Enterprise, and All That," in Burton W. Folsom, ed. *The Industrial Revolution and Free Trade* (Foundation for Economic Education, 1996), 117.

rent-seeking".[337] This is because "monopoly reduces the incentive of a firm to innovate and to minimize its costs."[338] Literature exists examining the welfare effects of granting different types of monopolies and exclusive rights. With respect to monopolies or exclusive rights of import or export, McCorriston and Maclaren, using the model of STEs, conclude that the precise welfare effect is related to the nature of the exclusive rights. They find that removing exclusive rights of import can leads to increases in consumer surplus, producer surplus, profits and overall social welfare. They find that removing exclusive rights of export can generate gains to the country that previously had state trading for exportation, as well as countries that compete in the importing region, while the importing region loses welfare because home country exports less than it does with the STE.[339] With respect to monopolies or exclusive rights on production or distribution, literature concludes that the control over the supply or the price has the effect of reducing welfare, given that production is not decided by the price, resulting in inefficient allocation of resources.[340] Some literature proves in a two-country model of monopolies in both countries, where domestic monopolies in a large country can take advantage of market power in the domestic and international markets, that eliminating all monopolies in both countries under trade, would certainly raise world welfare, although it may leave one country worse off. [341]

The welfare reducing effect of granting domestic monopolies/exclusive rights can be enhanced by the absence of international trade. Some literature believes that in a model where there is free trade between two nations and perfect competition globally, even if a firm is the only producer of a good in a country, i.e., the domestic production monopoly in one country, it will have little ability to

[337] The effect of monopoly is to make some consumers switch to goods "that cost society more to produce than the monopolized good. The added cost is a waste to society---deadweight loss." "The transfer of wealth from consumers to producers brought about by monopoly pricing is a conversion of consumer surplus into producer surplus. This transfer can be a source of social cost even if no distributional weights are assigned to transfers from consumers to producers." "If a monopoly or cartel has any expected monopoly profits, that expectation will induce firms to expend resources on forming and maintaining monopolies and cartels," and expanding market shares through non-price competition. These resources will be wasted from a social standpoint. *See* Richard A. Posner, *Economic Analysis of Law*, 6th edition (Wolters Kluwer Law & Business, 2003), 278-281.

[338] Richard A. Posner, *Economic Analysis of Law*, 6th edition (Wolters Kluwer Law & Business, 2003), 281-283.

[339] Steve McCorriston and Donald Maclaren, "Trade and Welfare Effects of State Trading Enterprises," Paper prepared for presentation at the 11th Congress of the EAAE (European Association of Agricultural Economists), The Future of Rural Europe in the Global Agri-Food System, (Copenhagen, Denmark, August 24-27, 2005), 9.

[340] Donald B. Billings and Ellis W. Lamborn, "Free Trade, Freedom of Enterprise, and All That," in Burton W. Folsom, ed. *The Industrial Revolution and Free Trade (*Foundation for Economic Education, 1996), 117.

[341] Jagdish N. Bhagwati, Arvind Panagariya & T.N. Srinivasan, *Lectures on International Trade*, 2nd ed. (1998), 309-11. J.R. Melvin and R.D. Warne, "Monopoly and the Theory of International Trade," 3 *Journal of International Economics* (1973): 117-34.

raise prices if there are many foreign suppliers and free trade, since the domestic monopolist has to face competition from imports. Therefore, with free trade, grants of monopolies to a domestic firm would not likely affect world welfare.[342] However, the reality is not entirely free trade. Thus, literature examines a model where there is a domestic monopoly or oligopolies, perfect competition outside the nation, and non-free trade policies, such as tariffs, import quotas, production subsidies, or export subsidies. It finds that non-free trade policies can protect the monopoly and enhance the monopoly's power, further reducing welfare. For instance, suppose a country imports a good and its import-competing production is controlled by only one firm. The tariff raises the domestic price as well as the output of the domestic industry, while it reduces imports. Hence, the tariff allows the monopolist to raise its price. To that end, a monopoly is protected by a tariff. Base on the same reason, a domestic monopoly is also protected by an import quota since no matter how high the domestic price is, imports cannot exceed the quota level.[343]

In the context of monopolies and exclusive rights granted to SOEs

The above analysis is applicable to SOEs with exclusive rights of import, export, production or distribution. Apart from that, the welfare reducing effect is more severe for SOEs receiving monopolies or exclusive rights. First, there is enhanced welfare reducing effects of monopolies in combination with non-free trade policies, such as subsidies. In comparison with the situation where POEs are granted monopolies and exclusive rights, there is more enhanced welfare reducing effects in situation where SOEs are granted monopolies and exclusive rights, given that SOEs after receiving monopolies or exclusive rights are more likely to receive subsidies. Both POEs and SOEs after receiving monopolies and exclusive rights are likely to lobby for protection and benefit most from it.[344] Despite that, SOEs that have been granted monopolies and exclusive rights are more likely to lobby for more advantages than POEs since SOEs are special interest groups that have a more powerful lobbying capacity than POEs, in light of their ownership and relationship with the

[342] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 215-217.
[343]Avinash Dixit, "International Trade Policy for Oligopolistic Industries," in Jagdish Bhagwati, *International Trade*, 2nd edition (MIT Press, 1987), 187; Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 215-217.
[344] Mancur Olson, *The Logic of Collective Action: Public Goods and The Theory of Groups* (Cambridge, MA: Harvard University Press, 1965). Jagdish Bhagwati, *Writings on International Economics* (V. M. Balasubramanyam, eds.,1997), 9;

government, and the countervailing power against these monopolistic or oligopolistic SOEs are weak.[345]

Second, there is difference between oligopolies granted to SOEs and granted to POEs in terms of the likelihood of succeeding in collusive behavior. Collusive behavior among SOEs is likely to succeed, given that it is easier for SOE blocs with such monopolies or exclusive rights to form a cartel for the purpose of non-competition out of their common controller, i.e., the state. In contrast, the member of a private cartel finds it hard to agree not to compete in every dimension, such as collusive pricing or non-price competition.[346] Last, in terms of price discriminatory practice by the monopolies,[347] SOEs with monopolies tend to price discriminate (higher prices for the domestic market and lower prices for foreign markets), charge lower prices, or engage in dumping or predatory dumping, due to the objective to pursue revenue maximization.[348] In addition, some research finds that SOEs are not problematic in terms of efficiency if they are operating in a competitive market.[349] In other words, SOEs with monopolies or exclusive rights are problematic since the grants of monopolies or exclusive rights turn perfect competition into imperfect competition, i.e., switch a competitive market into a non-competitive market.[350]

b. Undermine International Trade Agreements

Literature exists referring to state-trading monopolies as "another instrument through which a government can control the volume of trade".[351] Research comparing state trading and private

[345] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 277; Dominick Salvatore (edited), *Protectionism and World Welfare* (Cambridge England: Cambridge University Press, 1993), 97; John H. Jackson, William J. Davey & Alan O. Sykes, *Legal Problems of International Economic Relations, Cases, Materials and Text*, 5th edition (St. Paul, MN: Thomson/West, 2008), 50.
[346] Richard A. Posner, *Economic Analysis of Law*, 6th edition (Wolters Kluwer Law & Business, 2003), 281-283.
[347] *Id*., at 283-284.
[348] David E. M. Sappington and J. Gregory Sidak, Anticompetitive Behavior by State-Owned Enterprises: Incentives and Capabilities, in *Competing with the Government, Anticompetitive Behavior and Public Enterprises*, eds., Richard R. Geddes (Hoover Institution Press, 2004), 13.
[349] Aaditya Mattoo, "Dealing with Monopolies and State Enterprises: WTO rules for Goods and Services," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 37-70 (University of Michigan Press, 1998), 51.
[350] *Ibid*.
[351] Harriet Matejka, "Trade-Policy Instruments, State Trading and First-Best Trade Intervention," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 142-160 (UK: Palgrave Macmillan, 1982), 142; James E. Meade, The Theory of International Economic Policy, Volume Two: Trade and Welfare (London: Oxford University Press, 1955), 176; Charles P. Kindleberger, *International Economics*, 4th edition (Homewood, III.: Ricard D. Irwin Inc., 1968), 130.

trading found that competitive private traders have the freedom to choose, guided by the profit motive, which is either limited or non-existent under state trading.[352] State trading is more likely to exploit monopoly power in trade.[353] "State trading confers bargaining power far beyond that which a private-trading nation possesses in its trade, reaping more economic rewards than private traders."[354]

With respect to importing state trading, literature found that in the case of an STE, which is a monopolist trader in the domestic market of a single homogeneous commodity, the STE may lower the buying price of imports compared to the free-trade market solution.[355] McCorriston and MacLaren's research model uses STEs with exclusive rights to purchase from domestic producers and import, and sell as a single agency to domestic consumers. If the STE has the objective of maximizing producer surplus, the STE will be like a tariff since the level of imports will be lowered compared to the private firm benchmark, while if the STE has the objective of maximizing consumer surplus, the STE will be like an import subsidy. They found that trade effect differs as the nature of the exclusive rights varies by examining four scenarios.[356] In general, literature and empirical research prove the import-reducing effect of STEs with exclusive rights to imports.[357] State trading on import affects importation, with equivalent effects to a tariff, and will undermine tariff concessions. [358] With respect to exporting state trading, literature found that in the case of

[352] M. M. Kostecki, "State Trading by the Advanced and Developing Countries: The Background," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 6-21 (UK: Palgrave Macmillan, 1982), 6.
[353] Jagdish Bhagwati, *The World Trading System at Risk* (Princeton University Press, 1991), 110.
[354] Robert Loring Allen, "State Trading and Economic Warfare," 24 *Law and Contemporary Problems* (Spring 1959): 256-275, 265.
[355] M. M. Kostecki, "State Trading by the Advanced and Developing Countries: The Background," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 6-21 (UK: Palgrave Macmillan, 1982), 6.
[356] Steve McCorriston & Donald Maclaren, "Trade and Welfare Effects of State Trading Enterprises," Paper prepared for presentation at the XIth Congress of the EAAE (European Association of Agricultural Economists), *The Future of Rural Europe in the Global Agri-Food System* (Copenhagen, Denmark, August 24-27, 2005), 6.
[357] Jung-Hyun Yoon and Song Soo Lim, "Potential Trade Distortion Effects of State Trading Enterprises under the Tariff-Rate Quota Scheme," Economics Discussion Papers, No 2013-22, *Kiel Institute for the World Economy* (2013), 1. http://www.economics-ejournal.org/economics/discussionpapers/2013-22 ; Koushi Maeda, Nobuhiro Suzuki, and Harry M. Kaiser, "Measuring the Effects of Eliminating State Trading Enterprises on the World Wheat Sector," working paper, Department of Applied Economics and Management, Cornell University (2001). http://ageconsearch.umn.edu/handle/127664
[358] Jung-Hyun Yoon and Song Soo Lim (2013). Potential Trade Distortion Effects of State Trading Enterprises under the Tariff-Rate Quota Scheme. Economics: The Open-Access, Open-Assessment E-Journal, Vol. 7, 2013-31. http://dx.doi.org/10.5018/economics-ejournal.ja.2013-31 ; In a review of the role of the STE China National Cereals,

a STE, which is a monopolist trader in the domestic market of a single homogeneous commodity, the STE may raise the selling price of exports compared to the free-trade market solution, equivalent to export taxes.[359] McCorriston and Maclaren analyzes the case of the exporting STE, which can price discriminate between the home and foreign market.[360] Given that the STE's objective is to maximize the producer surplus of its input suppliers, it would be expected that, compared with the benchmark (a single commercial firm), the STE will sell less domestically and export more and hence be equivalent to an export subsidy.[361]

The above economic analysis demonstrate that state trading may undermine international trade agreements about tariffs, export taxes, export subsidies, and the non-discrimination principle. It is also applicable to SOEs receiving monopolies or exclusive rights to export or import. What's more, it is easier for governments to use the tools of SOEs, and the tool of giving monopolies and exclusive rights to SOEs, rather than POEs, to circumvent nations' obligations in trade agreements regarding tariffs, export taxes, export subsidies, and non-discrimination, given that the behavior of SOEs is less transparent.[362] Furthermore, the obligation of commercial considerations in decision-making without influence from the government is more likely to be broken when monopolies or exclusive rights are granted to SOEs than granted to POEs. This is because of the differences in the degree of control over the entity in question. The government has more control over SOEs with regard to production, price setting, importation and exportation, and can direct SOEs if monopolies and exclusive rights are granted to SOEs, as compared to POEs, who have their own profit-maximization as a priority and that may be in conflict with the government's directions and

Oils, and Foodstuffs Import and Export Company (COFCO), McCorriston and MacLaren (2010) measured COFCO's tariff equivalent for wheat imports.

[359] M. M. Kostecki, "State Trading by the Advanced and Developing Countries: The Background," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 6-21 (UK: Palgrave Macmillan, 1982), 6.

[360] Steve McCorriston and Donald Maclaren, "Trade and Welfare Effects of State Trading Enterprises," Paper prepared for presentation at the XIth Congress of the EAAE (European Association of Agricultural Economists), *The Future of Rural Europe in the Global Agri-Food System* (Copenhagen, Denmark, August 24-27, 2005), 7-8.

[361] The size of the distortion created by the STE depends upon the benchmark, and the greater the number of firms that would replace it, the smaller is the distortion. See Steve McCorriston & Donald Maclaren, *id*, at 8 and 9.

[362] *See* Alan Sykes, "The Questionable Case for Subsidies Regulation: A Comparative Perspective," Law and Economics Research Paper Series Paper No. 38; P.J. Lloyd, "State Trading and the Theory of International Trade," in *State Trading in International Markets: Theory and Practice of Industrialized and Developing Countries*, ed. M. M. Kostecki, 117-141 (UK: Palgrave Macmillan, 1982), 117-37.

policies. Thus, in cases of conflicts, POEs are more likely to pursue their own interests than SOEs.[363]

(3) Justifications May Work Weakly in cases of Granting Advantages to SOEs

The underlying rationale for establishing SOEs, granting monopolies and exclusive rights to SOEs,[364] having state trading, [365] and granting various advantages to SOEs, can be examined from major two perspectives, i.e., economic rationale and non-economic rationale. The economic rationale includes correction of market failure, where prices cannot properly measure marginal social costs and benefits due to externalities. When the externalities are taken into account, divergent opinions arise in the calculation of overall efficiency, which might be enhanced, such as by grants of financial advantages for R&D, for the protection of environment and natural resources, for the development of infant industry and etc.[366] Non-economic reasons include redistribution, national security, development goals, ideology of central planning economies, food security, stability, and so on. Some distributional justifications can be transferred into efficiency analysis by putting distributional objectives into preferences. For instance, the employment objective can be analyzed as a public good. Grants of advantages to POEs are more likely to be related to economic rationales, while grants of advantages to SOEs are more likely to be related to non-economic rationales.

For all justifications mentioned above, the following should be examined. First, whether the measure at issue (establishment of SOEs, grants of monopolies and exclusive rights, grants of advantages) is the best way to achieve the anticipated goals. [367] For example, if a domestic market

[363] Robert Loring Allen, "State Trading and Economic Warfare," 24 *Law and Contemporary Problems* (Spring 1959): 256-275, 266; Edmond M. Ianni, "State Trading: Its Nature and International Treatment," 5 *Nw. J. Int'l L. & Bus.* (1983-1984): 46, 52.
[364] Bernard M. Hoekman and Patrick Low, "State Trading: Rule Making Alternatives for Entities with Exclusive Rights," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 327-344 (University of Michigan Press, 1998), 329.
[365] Robert Loring Allen, "State Trading and Economic Warfare," 24 *Law and Contemporary Problems* (Spring 1959): 256-275, 258.
[366] Warren Schwartz & Eugene Harper, Jr., *The regulation of Subsidies Affecting International Trade*, 70 *MICH. L. REV.* (1972): 831, 841-2.
[367] Bernard M. Hoekman and Patrick Low, "State Trading: Rule Making Alternatives for Entities with Exclusive Rights," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 327-344 (University of Michigan Press, 1998), 329.

failure occurs, a trade policy response is at most a second-best option, since a new distortion is created. Domestic market failures should be corrected by domestic policies aimed directly at the problems' sources. For instance, trade subsidies are inferior to an optimum tax-cum-subsidy policy since trade subsidies are like tariffs that are directed at foreign trade whereas the problem to be tackled is one of domestic distortion.[368] Redistributing income can be best achieved by using lump-sum transfers, which do not change the optimal allocation of resources in the economy.[369] Second, grants of advantages also have costs including costs to taxpayers, administrative costs and other unintended consequences. Third, whether there are any alternative methods that can better achieve goals, such as using social security systems to address the unemployment issue or using other means to address layoffs caused by bankrupted SOEs. Last, it is hard to diagnose market failure well enough to prescribe policy.[370] It is not easy to identify the right industries or activities.[371] A variety of the non-economic arguments are essentially disguising governments' attempt to expand exports and market shares.

Some justifications, although they work well for advantages granted to POEs in general, work weakly in the situation of grants of advantages to SOEs as opposed to POEs since most of advantages granted to SOEs are solely due to the state ownership or state control.

2.3.4 Summary

This section explains the need to regulate SOEs receiving advantages from an economic perspective. According to the theory of comparative advantage and new trade theories, it is efficient for the world to engage in international trade. However, individual nations may not pursue free trade policies if left to choose for themselves. They may attempt to maximize their own national welfare at the expense of trading partners. Such unilateral measures may risk retaliation and lead to trade wars, making world welfare worse off. To prevent the sort of prisoner dilemma problems that uncoordinated national behavior presents, in practice, nations have agreed to

[368] Jagdish Bhagwati, *Writings on International Economics* (V. M. Balasubramanyam, eds.,1997), 86-87.
[369] Lump sum transfers should be designed so potential recipients cannot modify their behavior to affect who gets the transfer or the size of the transfer. *See* Karl D. Meilke and John Cranfield, "Production Subsidies," in *Handbook on International Trade Policy*, eds., William A. Kerr and James D. Gaisford (Edward Elgar Press, 2007).
[370] Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, 9th edition (Pearson Education, 2012), 226-227.
[371] *Id*., at 272-273.

facilitate trade by reducing trade barriers, through multilateral commitments to provide market access. However, the operation of SOEs, particularly the grants of various advantages to SOEs and the behavior of SOEs reduce global welfare and efficiency by distorting efficient allocation of resources, and undermining the market access commitments made by countries.

2.4 Conclusion of Chapter One

This Chapter defines the scope of the dissertation, which is to deal with the problem of granting advantages to SOEs that produce goods or services in global markets. Although the presence of SOEs in OECD countries is declining, there is a significant presence of SOEs in the global economy, particularly in the emerging countries, such as China, Russia, Brazil, India, Vietnam, Indonesia, etc. SOEs typically receive financial advantages, monopolies and exclusive rights, regulatory advantages, and other advantages. The advantages granted to SOEs are usually given in a less transparent way, in more various forms, and in more quantity than those granted to POEs. SOEs are more actively involved in global markets as compared to decades ago, particularly in international trade. Concerns have arisen that grants of various advantages to SOEs which are active in global markets may generate negative effects, specifically economic concerns relating to the grants of advantages per se and the behavior of SOEs that have been granted advantages. These economic concerns are my focus rather than complicated political concerns.

Historically, the phenomenon of having SOEs and giving advantages to SOEs has changed from having been perceived as non-problematic in times of an isolated world, to problematic in times of globalization and interdependence among nations. SOEs were established after the discovery of New World in about 1500. These entities were granted monopolies over trade, natural resources, lands, ports, and regulatory power over the colonies for the purpose of expanding foreign markets. This phenomenon was not perceived as problematic due to the desire to expand foreign markets by powerful countries, the fact that relatively little trade was involved, the limited life span of many of these companies, and the idea of mercantilism practiced largely by each nation.

After the Industrial Revolution, the extent of state involvement in economies became more intensive. Capitalist countries established STEs, particularly in the agricultural sector, to promote

exportation and limit importation particularly after WWI, and a nationalization wave occurred after 1960s in European countries, and also occasionally occurred in North America and other OECD countries. Various advantages, particularly export subsidies were granted to promote exportation of many agricultural commodities and manufactured products by European countries, the U.S. and Japan. Developing countries wanted to achieve domestic social and economic development after independence, and hence, they used STEs for importation and exportation of a wide range of products, such as raw materials and natural resources. Nationalization occurred to a great degree in the third world, such as Latin America, Africa, and Asia. The establishment of SOEs and grants of advantages were also used to implement import substitution policies in Latin America, India and Pakistan to reduce imports of industrial products. Out of the communist political philosophy, communist countries nationalized almost all industries, and controlled over all trading with foreigners. In these centrally-planned economies, all assets were owned and granted by the state. After the collapse of communist countries, state trading and grants of advantages to SOEs were still pervasive and remain to date.

In light of increased international trade due to globalization and interdependence, SOEs, STEs and the grants of advantages led to international tensions, negatively affected large multinational corporations, and generated economic and political concerns. Inefficient performance of SOEs and grants of advantages to them became burdens on governmental budgets rather than helping government revenues. SOEs and grants of advantages were either direct participation of governments or intervention in the economy, contrary to the idea and value of laisez-faire which trumps mercantilism, and has been embraced by Western countries along with their former colonies in practice.

SOEs and grants of advantages have been gradually perceived as problematic. Therefore, to solve the problem, privatization waves occurred worldwide beginning in the 1970s, starting in the European countries, North America, other OECD countries, and then spread to Latin America, Africa, Asia, and former communist countries. In addition, the number of STEs declined, the grants of subsidies were largely reduced, and governments withdrew the grants of monopolies to SOEs, particularly in the European countries in their moving to a single and integrated market, and in countries with their accession to the GATT or WTO. The problem was also targeted by regulations.

No particular regulations regarding granting advantages to enterprises existed before the 19th century at the international level. In the late 19th century, countries unilaterally used countervailing duties laws against advantages granted by governments to enterprises, particularly SOEs. Regional efforts in European countries and the international efforts such as the early GATT developed rules more or less disciplining SOEs and grants of advantages, such as competition rules in the European countries in their integration, and subsidy rules and state trading rules in the early GATT. In addition, recent efforts can be found in the TPP negotiations where rules on SOEs are concluded. The U.S. has pushed the inclusion of rules on SOEs in the TPP and its planned NAFTA renegotiation, and will likely to do the same in its future FTA negotiations.

From the economic perspective, different economic theories, including the comparative advantage theory and the new trade theories, explain that international trade is beneficial for each nation and the whole world in terms of increasing welfare and efficiency. The comparative advantage theory predicts that each country gains from trading in different products in which the country has comparative advantage, and the new trade theories based on economies of scale predicts that each country gains from intra-industry trade, i.e., differentiated products in the same industry. Under both theories, world welfare increases from these trades. To that end, international trade is beneficial for increasing welfare of each country and the world.

However, countries in reality usually do not adopt the free trade policy, but rather some trade restrictive policies. It is probably due to nations' motive to maximize their national welfare and to extract greater gains from trade at the expense of their trading partners as predicted by the terms of trade and strategic trade arguments. It is also probably due to the fact that self-interested politicians are influenced by lobbying activities of special interest groups pressing for trade restrictive policies that even may decrease the national welfare. Hence, international trade agreements are needed: i) to secure gains from trade even if unilateral protection doesn't adversely affect trading partners while world welfare decreases, or ii) to avoid negative externalities of unilateral protectionist measures, or iii) to avoid a trade war, which makes world welfare worse off. Given that grants of advantages to SOEs undermine international trade and international trade agreements in that they reduce more world welfare, and generate negative externalities, lead to trade wars, and hence undermine the benefits obtained from international trade agreements, in light

of some facts that SOEs are more capable to and are more likely to conduct anti-competitive behavior after receiving advantages, and SOEs' stronger lobbying power, grants of advantages to SOEs should be disciplined in the eyes of economists. Some justifications and exceptions work particularly weakly when applied to the cases of granting advantages to SOEs.

After examining the problem of SOE receiving various advantages in a global sense currently, the history of the problem, and the economic concerns underlying it, I will turn to focus on the issue in the context of China to figure out the uniqueness regarding the extent, nature, and trade effect of advantages given to Chinese SOEs, as well as why there is little incentive for China to deal with the problem.

Chapter 3: The Extent, Nature, and Effect of Advantages Granted to Chinese SOEs

This Chapter examines the problem of SOEs in the context of China. In particular, it considers the extent to which Chinese SOEs receive various advantages from the Chinese Government. In Section I, I begin with a general overview of the presence of SOEs in China and then look at the extent to which SOEs are present in several industries that are considered as key industries. In each industry, I give examples of major SOEs; their dominance or significant presence; their monopoly/oligopoly status, which is also related to advantages of monopolies and exclusive rights SOEs enjoy by law or in fact; the financial advantages they receive; and the regulatory advantages they enjoy.

In Section II, I describe the nature of the advantages granted to SOEs in China. In Section III, I lay out the trade effects of advantages granted to Chinese SOEs. In particular, I consider the importance of the facts that China is a large trader and that Chinese SOEs play a significant role in international trade. This has caused concern at the international level regarding the grants of advantages and the behavior of SOEs. Last, I explain in Section IV why there is little incentive for China to deal with the problems based on a political economy analysis and on historical and ideological factors.

3.1 The Extent of Advantages Granted to Chinese SOEs

3.1.1 General Description of SOEs in China

China was once a command economy.[372] Despite reforms and efforts to transition to a market economy, China nevertheless still practices state capitalism in many sectors.[373] The number of

[372] A command economy is one that has centrally planning economy and state-led resource allocation. *See* Paul R. Gregory, "The Stalinist Command Economy," *The Annual of the American Academy of Political and Social Science*, Vol. 507, Privatizing and Marketizing Socialism, 18-25 (Jan., 1990): 18; Valery Lazarev and Paul R. Gregory, "The Wheels of A Command Economy: Allocating Soviet Vehicles," (A Research Funded by Grants from the Hoover Institution and from the National Science Foundation, Oct. 2001): introduction. http://www.uh.edu/~vlazarev/ehr.pdf

[373] "Melding the power of the state with the power of capitalism, state-owned and state-controlled enterprises continue to control the commanding heights of the Chinese economy." *See* Michael M. Du (Ming Du), "China's State Capitalism and World Trade Law" 63 (2) *International and Comparative Law Quarterly* (Jan. 11, 2014), 409-448.

SOEs in China varies according to different definitions, and the structure of state capitalism is complex. This structure is mainly composed of two aspects. One is the State-Owned Assets Supervision and Administration Commission of the State Council (hereinafter the SASACs),[374] which is in charge of SOEs. The other is the investment and financial entities owned by Central Huijin Corp., which is a subsidiary of China Investment Corporation, a sovereign wealth fund, directly owned by the Ministry of Finance of China. On behalf of the state, there is one National SASAC holding shares of central SOEs, and local SASACs holding shares of local SOEs,[375] primarily in the following industries: military, petroleum and petrochemicals, steel, electricity, machinery and equipment, telecommunications, civilian airline and transportation, shipping, constructing, investment, and new technology. [376] Meanwhile, there is mix among SOEs owned by SASACs and financial and investment entities owned by Central Huijin Corp., with the emergence of cross shares holding.[377]

Compared to the historical state presence in the economy during its command-economy period, the number of SOEs has been reduced dramatically since the 1979 reform. In terms of central SOEs, the National SASAC, when established in 2003, had 196 central SOEs. The figure was 129 in 2009, 123 in 2010, 120 in 2011, 114 in 2013, 110 in 2015, and 106 in 2016.[378] As for SOEs in totality, there were nearly 120,000 SOEs in 2003, while there were 109,000 SOEs in total in

http://ssrn.com/abstract=2377797 ; Ronald J. Gilson and Curtis J. Milhaupt, "Sovereign Wealth Funds and Corporate Governance: A Minimalist Response to the New Mercantilism" Stanford University Law and Economics Olin Working Paper No. 355, and Columbia University Law and Economics Working Paper No. 328 (2008): 2. http://law.stanford.edu/wp-content/uploads/sites/default/files/publication/258673/doc/slspublic/Gilson%20Sovereign%20Wealth.pdf ; Xi Li, Xuewen Liu and Yong Wang, "A Model of China's State Capitalism," HKUST IEMS Working Paper N. 2015-12 (Feb. 2015), 2. http://iems.ust.hk/wp-content/uploads/2015/02/IEMSWP2015-12.pdf

[374] The SASACs were created by the State Council in March, 2003 based on "The Plan for Restructuring the State Council", which was adopted at the 1st session of the 10th National People's Congress in 2003. *See* Decision of the First Session of the Tenth National People's Congress on the Plan for Restructuring the State Council, March 03, 2003, English version http://www.lawinfochina.com/display.aspx?lib=law&id=6695&CGid=

[375] There are 112 central SOEs, last update/accessed on Sept. 7, 2016, *see* a list of central SOEs on the website of the State-owned Assets Supervision and Administration Commission of the State Council, http://www.sasac.gov.cn/n1180/n1226/n2425/index.html

[376] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 35-9.

[377] *Id*., at 36.

[378] For a list of central SOEs on the website of the State-owned Assets Supervision and Administration Commission of the State Council, http://www.sasac.gov.cn/n1180/n1226/n2425/index.html

2013.[379] The shrinking number is partially the result of an effort to consolidate SOEs into national champions. SOEs have largely withdrawn from competitive industries.

Nevertheless, SOEs still dominate the Chinese economy.[380] Furthermore, the retreat of state capitalism has slowed recently.[381] Different sources of statistics and research have different estimates of the significance of SOEs in the Chinese economy. One research paper overviews state capitalism in China by different indicators, including gross output value and value added, fixed investment, employment and wages, taxes or revenues, share of labor, and comparison of central SOEs and local SOEs through assets, profits and revenues.[382] It found that the SOE sector in China accounts for nearly 40 percent of China's economy at least.[383] For instance, from the indicator of tax revenues contributed by SOEs, the share was 48 percent in 2009.[384] In 2014, tax revenue contributed by SOEs was more than 50%.[385] An OECD study, using data from 2006, estimated that SOEs account for 29.7% of GDP, 40% of fixed investment and employ 40% of the urban labor force in China.[386] A report by the World Bank in 2012 showed that the share of SOEs in China's

[379] "Operation Report of SOEs Subject to the National SASAC in 2013," *SASAC's Statistical and Assessment agency*, August 8, 2014. http://www.sasac.gov.cn/n86302/n326735/n326745/c1327899/content.html

[380] Julia Ya Qin, "WTO Regulation of Subsidies to State-Owned Enterprises (SOEs)- A Critical Appraisal of the China Accession Protocol," 7(4) *Journal of International Economic Law*: 863-919; Shang-Jin Wei and Tao Wang, "The Siamese Twins: Do State-Owned Banks Favor State-Owned Enterprises in China?" 8(1) *China Economic Review Volume* (1997): 19-29; Hejing Chen & John Whalley, "The State-owned Enterprises Issue in China's Prospective Trade Negotiations," *Centre for International Governance Innovation* (2014).

[381] In China, there is a perceived phenomenon described as 'the state advances, the private (sector) retreats' (guo jin min tui) in recent years. FAN Gang and Nicholas C. Hope, "Chapter 16: The Role of State-Owned Enterprises in the Chinese Economy," *China US Focus*, 4. http://www.chinausfocus.com/2022/wp-content/uploads/Part+02-Chapter+16.pdf

[382] Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011): 11-20.

[383] If the output of urban collective enterprises and the government-run proportion of township-village enterprises (TVEs refer to the location of the enterprises) are considered, the broadly defined state sector likely surpasses 50 percent. See *id*., at 6.

[384] The China Statistical Yearbook (CSY) 2009.

[385] Yajie Wang, "Experts: Tax contributed by SOEs Accounts More than Half of the Total Tax in China", NBD, Jan. 05, 2015. http://money.163.com/15/0105/00/AF5I5HND00253B0H.html

[386] Junyeop Lee, "State Owned Enterprises in China: Reviewing the Evidence," Organization for Economic Cooperation and Development, OECD Occasional Paper (2009), 15. www.oecd.org/dataoecd/14/30/42095493.pdf Other estimates are higher, ranging from 30 to 40 percent or even above 50 percent of China's economy depending on how the state sector is defined. *See* DL Scissors, "State-owned Enterprises in China": Testimony before the US-China Economic and Security Review Commission (2011).

economic output was 45%.[387] In spite of the decline, SOEs account for about 50% of total bank credit and 40 % of total industrial corporate assets in 2015.[388]

Taking the example of stock exchanges in China, SOEs have established numerous subsidiaries.[389] For example, a single central SOE has 116 subsidiaries in China alone.[390] The parent SOE usually has several subsidiaries listed on stock exchanges. Different data sources estimate differently the extent of the presence of SOEs on stock exchanges in China. Almost 50% of listed companies on the Shanghai Stock Exchange are SOEs' subsidiaries.[391] In 2010, among 1700 publicly traded enterprises on stock exchanges (A-shares[392]) in China, there were 992 SOEs, accounting for 60% of the total.[393] At the end of September 2011, 1,047 SOEs were listed on the exchanges in Shanghai and Shenzhen, accounting for 44.7% of companies listed.[394] There are 42 SOEs on the Hong Kong Stock Exchange (H-shares[395]).[396] SOEs constitute 80 percent of the value of the Chinese stock market in 2011.[397] Central SOEs' listed subsidiaries represent around one-third of the entire value of the Chinese domestic stock exchanges.[398]

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[387] "World Bank Reported that Chinese SOEs account for 45% of China's economy, and the Presence of Chinese SOEs Should be Reduced," *Sina*, Feb. 24, 2012.
http://finance.sina.com.cn/china/20120224/151211448532.shtml

[388] International Monetary Fund, *The People's Republic of China: Selected Issues*, IMF Country Report No. 16/271 (Washington D.C.: IMF, Aug. 2016), 38.

[389] Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 26.

[390] A review of the D&B® Family Tree for the China State Construction Engineering Corporation (CSCEC)

[391] *Also See* top ten enterprise by market capitalization on the Shanghai Exchanges in 2002, 2007, 2015 by assets.

[392] A-Shares refer to shares in mainland China-based companies that trade on Chinese stock exchanges such as the Shanghai Stock Exchange and the Shenzhen Stock Exchange, based on the RMB currency. A-shares are generally only available for purchase by mainland citizens. *See* A-Shares, INVESTOPEDIA, available at http://www.investopedia.com/terms/a/a-shares.asp

[393] Qing Ze, "How are subsidies granted to SOEs?" JING55, Nov.20, 2014.
http://www.jing55.com/toutiao/20141120/210e8b75dae30d5e72189.html

[394] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, summary, pp. 35, 58, 61, 63, 72, 73, 114 and 121.

[395] H-Shares refer to a share of a company incorporated in the Chinese mainland that is listed on the Hong Kong Stock Exchange or other foreign exchange. H-shares are still regulated by Chinese law, but they are denominated in Hong Kong dollars and trade the same as other equities on the Hong Kong Stock Exchange. *See* H-Shares, *Investopedia*, available at http://www.investopedia.com/terms/h/hshares.asp

[396] For a list of SOEs publicly traded on Hong Kong Stock Exchange, *see* "Stocks, SOEs shares," QUAMNET, http://www.quamnet.com/learninglist.action?articleId=1145367

[397] Adrian Wooldridge, "The Visible Hand", *The Economist* (Jan 21, 2012).
http://www.economist.com/node/21542931 ; *See* Also U.S.-China Economic and Security Review Commission, 2011 Report to Congress (Nov. 2011) 40.

[398] Mikael Mattlin, "Chinese Strategic State-Owned Enterprises and Ownership Control," *Brussels Institute of Contemporary China Studies: Research Project: Asia Paper*, 4 (6) BICCS Asia Paper (2010), 9.

The dominance of central SOEs is worthy of attention. Although the number of central SOEs controlled by the National SASAC has declined over the years, central SOEs are expanding in strategic and pillar industries, with increasing monopolistic powers. Many central SOEs are world champions. "Although not large in number, the size and importance of central SOEs to the national economy in many respects surpass that of all the other SOEs combined."[399] In 2009, central SOEs accounted for roughly 40% of total non-financial SOE assets, 60% of total SOEs' sales and over 70% of total SOEs' profits.[400] The Chinese Government is the biggest shareholder in China's 150 largest companies.[401] SOEs account for 85% of the top 500 Chinese enterprises.[402] In 2013, 95 Chinese firms appeared on the list of Fortune Global 500, compared with 79 in 2012, 69 in 2011, 54 in 2010 and 13 in 2003, and 77 of the 95 firms on the list are SOEs.[403]

3.1.2 The Extent of Advantages Granted to SOEs by Sectors

This section gives an account of the presence of SOEs in different sectors, along with the extent of advantages granted to Chinese SOEs by sector. I picked ten sectors using the criteria of categorization based on Chinese industrial policies and whether the sector has significant international trade effects. I collected information on companies generally from the following sources: (i) annual reports of companies which are listed on stock exchanges; (ii) China Statistic Yearbooks; (iii) articles and books; (iv) reports from international organizations, such as the WTO, World Bank, Organization for Economic Co-operation and Development (OECD); (v) reports from research institutes and think tanks; (vi) data from database and magazines, such as Forbes;

http://www.thepresidency.gov.za/electronicreport/downloads/volume_4/business_case_viability/BC1_Research_Material/AsiaPaper4.pdf

[399] Michael M. Du (Ming Du), "China's State Capitalism and World Trade Law" 63 (2*) International and Comparative Law Quarterly* (Jan. 11, 2014): 409-448, 10. http://ssrn.com/abstract=2377797

[400] Yh Deng et al., "Monetary and Fiscal Stimuli, Ownership Structure, and China's Housing Market" NBER Working Paper 16871, (2011), 21 <http://www.nber.org/papers/w16871>.

[401] Adrian Wooldridge, "The Visible Hand", *The Economist* (Jan 21, 2012).
http://www.economist.com/node/21542931 ; *See* also United States-China Economic and Security Review Commission, 2011 Report to Congress (Nov. 2011) 40.

[402] Top 500 Chinese enterprises, POEs account for 15%.

[403] Jie Wu, "Scrutinizing China's Fortune Global 500 Companies'", Guo Qi, August 14, 2013. http://news.xinhuanet.com/fortune/2013-08/14/c_125166671.htm.
http://www.sasac.gov.cn/n1180/n1271/n20515/n2697206/15243512.html.

and (vii) governmental reports at national level, such as reports from bureaus of China, the U.S. and the EU.

It should be admitted that some data may not be the latest or newest and some data is missing. This is partially due to the following reasons: (i) international organizations and research institutes do not issue reports on the same topic annually. Instead, once one report has been produced, the same topic may not be reported in the following years; (ii) data about SOEs and advantages they receive is not always available in China; (iii) the situation of granting advantages to SOEs in China is relatively complex, and what I found is only a glimpse of the whole picture. It should be admitted that there is difficulty in finding the complete information regarding advantages granted to Chinese SOEs and POEs. I have tried to collect the most recent data as best I could.

The categorization of sectors into strategic sectors and pillar sectors is practiced by China.[404] The state maintains sole ownership or absolute control over the strategic industries and a strong control over the pillar industries.[405] In strategic industries, from the aspects of shares of revenue, output, investments and markets, it appears that the visible share of the state exceeds 60 percent. Because the state may indirectly control other firms, the true level of state control is likely higher, but this could not be documented.[406] Literature finds that with the exception of autos and steel, the visible state revenue shares in the pillar industries are well below 50 percent. Still, there continue to be prominent SOEs in the pillar industry sectors.[407]

I give examples of SOEs in each industry receiving various advantages as opposed to POEs, after

[404] There are various standards for categorizing industries into the strategic sector, and the standards are adjusted over the time. On December 5, 2006, the SASAC chairman designated 7 industries (defense, electric power and grid, petroleum and petrochemicals, telecommunications, coal, civil aviation, and shipping) to be strategic.
[405] Elizabeth J. Drake, "Chinese State-Owned and State-Controlled Enterprises: Policy Options for Addressing Chinese State-Owned Enterprises," Testimony before the U.S. – China Economic and Security Review Commission (Partner, Law Offices of Stewart and Stewart , 15 Feb. 2012), 1; Julia Ya Qin, "WTO Regulation of Subsidies to State-Owned Enterprises (SOEs)- A Critical Appraisal of the China Accession Protocol," 7(4) *Journal of International Economic Law*: 863-919; Strong control reflects an ownership share of 30-to-50 percent. *See* "China's Industrial Policy and Its Impact on U.S. Companies, Workers, and the American Economy: Testimony of Terrence P. Stewart, (2009); The State Council's General Office Circular on the Guidance Opinions about Promoting the Adjustment of State-owned Assets and the Restructuring of State owned Enterprise (Guo Ban Fa 2006/97); Section 2.2 of the State Council Circular on Deepening the Reform of Economic Regime in 2010.
[406] Andrew Szamosszegi & Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 44-48.
[407] *Ibid*.

a brief introduction of the history of SOEs in each sector.[408] In my empirical findings about SOEs, my focus is on the SOEs that are active in global markets.[409] My findings are only a piece of the big picture since only a few well-performing subsidiaries of SOE groups are publicly listed on stock exchanges.[410] I picked representative SOEs in each industry. I looked at the annual financial reports from 2007 to 2014 of companies listed on the Shanghai Stock Exchange, Shenzheng Stock Exchange, HongKong Stock Exchange, Security and Exchange Commission (NYSE), and Taiwan Stock Exchange. These companies either have exports or are import-competing companies. Hence, they have impacts on international trade. Then I identified whether a company is an SOE or POE by looking at the top ten shareholders in the report. I looked at "non-operating income, government subsidies, or government grants," to find out financial advantages. "Other income" is not covered in the analysis since it is difficult to figure out what this "other income" exactly refers to.[411] I also looked at the interest rates to see if they are particularly low. The comparison between advantages granted to SOEs and POEs takes into account the factor of annual revenues. I looked at the top 500 Chinese POEs, most of which are not publicly traded companies.

(1) Traditional Strategic Industries

a. The Coal Industry

Since the 1979 reform, the coal industry has experienced a diversity of ownership and decentralization, going from a predominance of SOEs to localization. From 1979 to 1987, there was growth of the non-state sector, such as rural collectives and individual small-scale coal mines.[412] Due to the shortages in state output, privately-owned coal mines accounted for three-

[408] I exclude defense industry and power industry, which usually have no international trade effects.
[409] "SOEs" here do not cover rural cooperative organizations.
[410] It is because that a parent SOE may have numerous subsidiary companies, one or a couple of which may be listed publicly on Stock Exchanges. However, the information regarding unlisted parent SOE and its unlisted subsidiaries is largely unavailable, and hence, they are not included in my findings. That's the reason why my findings are only a piece of the big picture.
[411] I only look at "subsidies, government grants", and occasionally use the column of "other income/revenue/gains" to serve as a substitute. For instance, China Mobile said that its subsidies from the government were included in the "other income", which didn't specify the detailed information.
[412] Barry Naughton, *Growing Out of the Plan: Chinese Economic Reform, 1978-1993* (Cambridge University Press, 1996), 200-43 (Chapter 6).

quarters of the total growth of coal output over 1979-87.[413] It led to the policy of letting local government manage the coal industry rather than the central government, which no longer issues production plans for producing coal.[414]

However, since the 1990s, and particularly after the large-scale restructuring and consolidation in 2009 and 2010 in light of many coal mine accidents, with the closing down of a lot of small and mid-sized private mining firms and their mergers with SOEs, SOEs in the coal industry regained a predominance.[415] This can be shown from the list of major SOEs and their percentage of contribution to industry revenue and output.[416] The total SOE share of coal output is nearly 60 percent in 2010.[417] China Shenhua Energy Company Limited (an SOE), as the top one among all publicly traded companies globally, produces and sells coal, generates electricity, and operates railways, seaports, and airlines. Its energy and transportation businesses are primarily used for serving the coal business.[418] Except for a couple of central SOEs, most SOEs in the coal industry are controlled by local governments and dominate in their corresponding districts.[419] This corresponds to my empirical findings, which find that there are no privately-owned coal companies listed on the Shanghai Stock Exchange nor the Shenzhen Stock Exchange (small and medium sized board). Most coal companies listed on the Shanghai Stock Exchange are local SOEs. It suggests that SOEs enjoy in fact dominance.

SOEs in the coal industry receive advantages as follows. Subsidies may be granted after privatization to the POE that purchased the SOE. For instance, Sundiro Holding (Xindazhou), a POE, mainly operated an automobiles business before 2006. Then it purchased an SOE (Wujiu Group----Five Nine Group) at the end of 2006. The coal business has become its major business

[413] Jiagui Chen, Research on the 30 Years of China's Stat-owned Enterprise Reform, eds. Zheng LV and Sujian Huang (China: Economy & Management Publishing House, 2008), 319. [Lv Zheng, Huang Sujian Zhubian, Zhongguo Guoyou Qiye Gaige Sanshinian Yanjiu, Jingji Guanli Chuganshe].
[414] *Id*., at 319.
[415] FAN Gang and Nicholas C. Hope, "Chapter 16: The Role of State-Owned Enterprises in the Chinese Economy," *China US Focus*, 4. http://www.chinausfocus.com/2022/wp-content/uploads/Part+02-Chapter+16.pdf
[416] China Statistical Yearbook 1999 and 2012. In the mining and washing of coal, SOEs presence: Number of firms decreased from 49.5% to 11.5%, Gross industrial output decreased from 81.9% to 53.6%, total assets from 92.7% in 1998 to 94.7% in 2011.
[417] National Bureau of Statistics data; Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 44-48.
[418] China Shenhua Energy Company Limited's annual financial report to Shanghai Stock Exchange.
[419] China National Coal Group Corp. (ChinaCoal) China Coal Technology & Engineering Group Corp. (CCTEG).

since 2007. It also continued with other businesses as minor businesses.[420] No subsidies were granted to it before 2007, while it received subsidies from 2008 to 2014. There are no explanations for the subsidies it received in 2008 and 2009 in its financial reports.[421] It raises suspicions about whether the subsidies were related to the privatization of the SOE, i.e., part of its assets were previously state-owned.[422] In 2010, it received subsidies related to the SOE it purchased given that the SOE before privatization got compensation for its purchase of a bond issued by the state.[423] This compensation continued since the bond has not expired yet. Meanwhile, it received subsidies in the form of financial transfer of money.[424] In 2011 and 2012, the major part of subsidies granted to it was related to a previous SOE (Wujiu Group), i.e., subsidies for its state bond and shutting down one mine.[425] (This case is similar to the case of Hai'er, which is a POE that purchased an SOE due to privatization. It also received significant subsidies.)

Taking Pinding Shan Tian AN Coal Ltd. (an SOE)[426] as an example, it received subsidies for upgrading one of its mines,[427] subsidies for a project undertaken by it to develop an automatic intelligent control system and equipment for exploring for coal.[428] But it was unknown how Pinding Shan got the project in the first place. It also got compensation for supporting the steel industry by providing coal at lower prices.[429] In 2005, Pingding Shan Tian AN Coal was exempted by a local government from resource taxes in an amount of about RMB 4.8 million.[430]

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[420] Other businesses include auto-motors, logistics transportation, production of electric motors and housing management. (I looked at the specific information regarding coal business for the operation income). *See* Sundiro Holding's financial report of 2008 from the Shenzhen Stock Exchange main board.

[421] Sundiro Holding's financial reports from 2007 to 2014 from the Shenzhen Stock Exchange main board.

[422] It said that it had no subsidies in its 2009 financial report while it said that in the previous period (2009) it received subsidies in its 2010 financial report. Hence, I used the 2010 financial report and didn't find the reason for government's granting subsidies. *See Id.*

[423] Usually purchasing state bonds would be an obligation imposed on SOEs.

[424] From a legal perspective, it is specific, while regarding whether the tax refund is a form of reward (I am not sure what rewards here refer to), and whether it is specific or not, it is not clear.

[425] There were several mines forced to shut down by the government in 2011, in Inter Mongolia. http://www.coalchina.org.cn/page/info.jsp?id=58638

[426] PingDing Shan Tian An Coal Co. Ltd is an SOE with state shares of 56.12% in 2014 shown in its financial report of 2014 from Shanghai Security Exchange Board.

[427] Subsidies were granted for updating Chaochuang Mine and updating Tianzhuang Mile, both of which belong to Pinding Shan Tian An Coal Ltd. From a legal perspective, subsidies were specific for this company since subsidies were specifically for this project.

[428] The gross subsidies of Pinding Shan were RMB 75.44 million from 2008-2014.

[429] The steel industry needs significant coal used to produce energy for production and processing steel. The coal industry provides coal at lower prices pursuant to the national policy of encouraging/supporting the steel industry, then the state compensates/subsidizes coal companies.

[430] Due to the state ownership of natural resources, the state would usually grant enterprises the right to explore natural

Taking China Coal Energy Company Limited (an SOE)[431] as an example, it received subsidies for a specific project of producing equipment used for mining. Such subsidies can affect the production capacity of SOEs.

Table 15 Examples of Subsidies Received in the Coal Industry From 2007 to 2014

(Unit: million RMB)

Name of the company	SOE or POE	Revenue in 2014	Subsidies in 2014	Subsidies in 2013	2012	2011	2010	2009	2008	2007	Gross subsidies
China Shenhua Energy Company Lid.	SOE (90%)	248,360	601 [432]	232	192	128	203	21	63	51	1491
China Coal Energy Company Limited	SOE (with state shares 57%)	87,292	175	64	89	78	59	120	656	101	1,340
Sundiro Holding (Xindazhou)	POE	590	7	2	3	2	1	0.21	0.63	0	17

Note: Sundiro Holding (Xindazhou) received more subsidies than China Coal Energy Company in light of the ratio of gross subsidies to their revenues. It might be that some information of granting financial advantages to SOEs are not open to the public as such that what I found was only a portion of the whole financial advantages granted to SOEs. For instance, I only looked at "subsidies", rather than "other incomes", of which the information is lacking about what precisely the content is under the item of "other incomes". Nevertheless, given that SOEs dominate the sector, most of the beneficiaries from subsidies are SOEs.

SOEs in the coal industry receive advantages from having better access to railways for transporting coal used for generating electricity or producing steel. There are different kinds of coal for different usages. Coking coal is the input for producing steel, and the thermal coal is primarily used for

resources and impose taxes on them as the resource tax. From a legal perspective, it was specific for this company since the title of legal document in question explicitly refers to Pingding Shan Tian An Coal Ltd.

[431] China National Coal Group owned China Coal Energy Company Limited, which is trade on the Shanghai and the Hongkong Security Exchange. But the financial information released to the Shanghai Stock Exchange is different from the information released to the HK Stock Exchange regarding subsidies (government grants), I looked at the assets and other items, and assume it is the same company with same assets. The difference may be due to different accounting standards. Other subsidies are given with no available information.

[432] I estimated the amount of subsidies according to its annual report 2014 which said that non-operational income was 925 billion RMB in 2014, and 556 billion RMB in 2013. The main reason for the growth of non-operational income was increased subsidization from the government.

generating electricity and energy.[433] 67.1% of energy (electricity) is generated from coal in China. 50% of coal is used for generating electricity and utilities, and 18.7% of coal is used for producing steel, and the remaining amounts are used for heavy industry and manufacturing industry.[434] The transportation costs account for almost half of the coal prices. [435] Transporting coal by road is too expensive and is limited by capacity. Railways are a better way for transporting coal, especially the express railways. However, governmental policies favor SOEs in getting access to railways and the express railways (non-stops) are almost exclusively used by SOEs.

In summary, SOEs dominate the coal industry after the consolidation strategy. Financial advantages granted to the coal industry are intensive, both to SOEs and large POEs. Nevertheless, given that SOEs dominate the sector, most of the beneficiaries from subsidies are SOEs. In addition, SOEs in the coal industry receive advantages through getting better access to railways which are operated by SOEs.

b. The Civil Aviation Sector

Advantages of monopoly and exclusive rights enjoyed by SOEs in the civilian airline and associated industries can be shown as follows. The history of airline reform shows that the civilian airline was transferred from being under the control of military and administrative agencies to being under the control of SOEs.[436] From 1987 to 2006, the airline industry was entirely controlled by six giant SOEs, including three SOEs in charge of air transportation, and the remaining three in charge of services associated with airlines.[437] Beginning in 2006, POEs are allowed to enter the airline industry. However, SOEs still dominate. Among 46 airlines in China in 2013, there are 36 state-owned airlines. [438] The top SOEs account for three-quarters of the airline industry's

[433] "What Makes China Turn to A Large Importer of Coal from a Large Export of Coal Overnight", accessed Sept. 15 2016. https://www.zhihu.com/question/19994194/answer/26855727
[434] *Id*.
[435] "SOEs in the Coal Industry and SOEs in the Electricity Industry are the major source of selling coal, and PingCoal (an SOE) makes profits at the amount of trillions RMB per year", *blog, the Chinese Times*, March 6, 2010. http://blog.sina.com.cn/s/blog_5efc3eed0100hkmq.html
[436] Jiagui Chen, *Research on the 30 Years of China's Stat-owned Enterprise Reform*, eds. Zheng LV and Sujian Huang (China: Economy & Management Publishing House, 2008).
[437] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 122-210.
[438] In 2013, there were 46 airlines for air transportation, among which 36 were SOEs and 10 were POEs.

revenues.[439] For instance, China Southern, China Eastern, and Shanghai Air accounted for 71 percent of the Chinese airline services market.[440]

The aviation fuel supply is solely monopolized by one SOE, namely, China National Aviation Fuel Corp., which sells aviation fuel at prices which are 50-100% higher than the world prices. China Aviation Suppliers Holding Company, which is an SOE, monopolizes the supply of aircraft to Chinese airline companies.[441]

Regulatory advantages can be found from the pricing policy maintained by the government. Although the Chinese Government has relaxed price control in monopolistic industries, such as the airline industry, switching from government-set prices to government-guided prices with a flexible range of 10%, it still retains a certain degree of price control.[442] Other advantages may include the fact that the key flights routes are still mainly controlled by SOEs.

Financial advantages given to SOE airlines include specific subsidies to specific airlines (a particular SOE) for its particular flights. Eastern Airlines received subsidies for certain flights, for refunds of money paid for the construction of airport facilities, and financial transfer of money from the treasury, and a specific subsidies program particularly for Eastern Airlines, and other subsidies with no explanation given. Similar subsidies were also given to Southern Airlines and Hainan Airlines, which is a POE. However, the amount of money varies to a great degree, even taking account into the difference in their revenues. The amount of subsidies given to Hainan Airlines (a POE), is less than other SOEs from 2007 to 2014.[443] (See Table 16 below). As for

[439] Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 44-48. Table V-3: Top SOE share of revenues in China's air transportation sector, 2009.
[440] During the first three quarters of 2009, China Southern had a market share of 30 percent, compared to 19 percent for China Eastern and 17 percent for Air China. Shanghai Air, owned by China Eastern, held 5 percent of the market.
[441] Relaxing entry into the civilian airlines in terms of domestic flights routes, the legal document "Regulations on Permitting of Domestic Flight Routes in China's Civilian Aviation" [中国民用航空国内航线经营许可规定] March 20, 2006. for a Chinese version available at http://www.chinalawindex.cn/lawdb/detail/ef329fe49d5946bcb85ddf07ff10ef93 ;"The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 122-210.
[442] Jiagui Chen, *Research on the 30 Years of China's Stat-owned Enterprise Reform*, eds. Zheng LV and Sujian Huang (China: Economy & Management Publishing House, 2008).
[443] 2007-2014 Financial reports of Hainan Airlines, Eastern Airlines, Southern Airlines,

capital injection, for instance, a large inflow was received by China Southern in the form of a capital injection from its SOE parent, the China Southern Airlines Holding Corporation.[444] China Southern, as well as China Eastern, has been increasing debt from state-owned banks.[445] In addition, China Southern Airlines Company Limited continued to benefit from tax preferences in 2010.[446]

Table 16 Subsidies Received by Eastern Airlines, Southern Airlines and Hainan Airlines from 2007 to 2014

(Unit: million RMB)

Name of the company	SOE or POE	Revenue in 2014	Subsidies in 2014	Subsidies in 2013	2012	2011	2010	2009	2008	2007	Gross subsidies
Eastern Airlines	SOE 40%	89,746	3,627	2,369	1,720	1,061	659	1,288	405	488	11,616
Southern Airlines	SOE 53%	81,852	1,728	1,176	1,258	828	553	1,869	901	329	8,642
Hainan Airlines	POE	36,044	504	362	460	333	208	493	139	43	2,543

In summary, in the civil airline and associated industries, most financial advantages granted to SOEs were specifically targeted for them. SOEs received disproportionally more financial advantages than POEs. SOEs maintain a predominant position. SOEs also enjoy regulatory advantages through the government's price control.

c. The Petroleum and Petrochemical Sector

The petroleum and petrochemical sector was previously operated by energy administrative agencies. In the 1980s, SOEs, such as China National Petroleum Corporation (CNPC) and China

Eastern Airlines: operation income: 8974 in 2014, gross subsidies 11,616 from 2007-2014; Southern Airlines: operation income 8158 in 2014, gross subsidies 8642 from 2007-2014; Hainan Airlines: operation income 3604 in 2014, gross subsidies 2542 from 2007-2014. Subsidies are not corresponding to the size of the company.

[444] Form 20-F of China Southern Airline Corporation Limited in 2010 and 2011.
Xinhua News Agency, "China Southern Airlines likely to receive capital injection of the amount of 1.5 billion RMB," 22 Feb. 2010.

[445] Agricultural Bank of China. *ABC Signed the Bank-Enterprise Comprehensive Strategic Cooperation Agreement with China Southern Airlines*. Beijing, June 11, 2011.

[446] A review of the SEC filings of the five firms (Aluminum Corporation of China Limited (Chalco), China Petroleum & Chemical Corporation (Sinopec Corp.), China Southern Airlines Company Limited, China Telecom Corp. Limited, CNOOC Limited) indicates that they continued to benefit from tax preferences in 2010, though the benefit is being phased out. Nargiza Salidjanova, "Going Out: An Overview of China's Outward Foreign Direct Investment," US-China Economic & Security Review Commission, USCC Staff Research Report (Washington: March 30, 2011), 19-24.

Petroleum and Chemical Corporation (Sinopec group), [447] separated from the energy administrative agencies, and lost regulatory power later. State ownership accounts for approximately three-quarters of output in the petroleum and petrochemical sector.[448] The state accounted for 78 percent of fixed asset investment in 2009.[449] As for monopolistic industries like petroleum, although some subsidiaries became publicly traded companies out of the need for capital, [450] the parent company is wholly owned by the State.

Vertically integrated monopolies can be found in the petroleum industry. China National Offshore Oil Corporation (CNOOC)[451] was established by the state in 1982 to take charge of overseas investment in oil fields in relation to offshore exploration and processing. CNPC and Sinopec Group are both vertically integrated monopolies with different focuses. Sinopec Group is in charge of exportation and importation of oil and oil related products, and primarily focuses on processing crude oil and chemical products. CNPC primarily focuses on exploration. CNPC and Sinopec Group became giant corporate groups, with integration of upstream and downstream sectors, including extraction, production, processing, distribution of crude oil and processed oil from the upstream all the way to downstream sectors. They are central SOEs, subject to central government control. Local SOEs were gradually integrated into these two giants. The two giant SOEs, CNPC and Sinopec Group, along with CNOOC, enjoy monopolies as follows:

(i) The three SOEs (CNPC, Sinopec Group, and CNOOC) are in absolute control of crude oil exploration. POEs are only allowed to explore for crude oil in coordination with the three SOEs, and 20% of the crude oil discovered by POEs shall be given to CNPC for free, and the remaining 80% shall be sold to CNPC at prices set by CNPC.

[447] CNPC is the parent company of PetroChina, and Sinopec Group is the parent company of Sinopec Ltd. Each of them has subsidies. CNPPC has CNOOC Limited and China Oilfield Services.
[448] It is based on data from the China Petroleum and Chemical Industry Association.
[449] Table V-5: Top SOE share of revenues in China's petroleum and petrochemical industry, 2010 in Usha C.V. Haley and George T. Haley, *Subsidies to Chinese Industry, State Capitalism, Business Strategy, and Trade Policy* (Oxford Uni. Press, 2013).
[450] Jiagui Chen, *Research on the 30 Years of China's Stat-owned Enterprise Reform*, eds. Zheng LV and Sujian Huang (China: Economy & Management Publishing House, 2008).
[451] CNOOC: HKES is a Hong Kong-listed firm 70 percent owned by an unlisted parent company, whose shares are owned by the central governmental agency, SASAC.

(ii) All wholesale distribution of processed oil (gasoline, Kerosene, Diesel) is required to be handled by CNPC and Sinopec Group.[452] It is like a marketing board.

(iii) Transportation of oil requires permission from CNPC and Sinopec Group, which are authorized to request the railways to provide transportation.[453] It is subject to the discretion of CNPC and Sinopec regarding giving permission. It indicates that POEs have to bear extra costs of applying for the permission. Furthermore, without permission, POEs have no choice but to transport processed oil by road, which costs more than transportation by railway, while processed oil of SOEs can be easily transported by rail. It is one form of regulatory advantages granted to SOEs.[454]

(iv) Crude oil can be imported by STEs and non-STEs. There are five STEs that import crude oil and they are all SOEs. There are 22 non-STEs that import crude oil, half of which are subsidiaries of SOEs, such as CNPC and Sinopec Group. Enterprises that have the right to import crude oil, still need to deal with CNPC and Sinopec Group, otherwise the crude oil cannot pass customs and cannot be transported by railways. the amount of crude oil that can be imported by non-state trading enterprises is limited subject to approval.[455]

(v) All imported crude oil can only be sold to CNPC and Sinopec Group for processing, despite the fact that the crude oil processing is not monopolized by CNPC and Sinopec Group.

(vi) In the production and processing of crude oil, although POEs are allowed to process oil, these POEs can only buy crude oil from the three SOEs (CNPC, Sinopec Group and CNOOC), and can sell processed oil only to CNPC and Sinopec.[456]

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[452] "Opinions Regarding Regulating Small Refineries and the Distribution of Crude Oil and Processed Oil" (the so called Doc. No. 38) [Guangyu Qingli Zhengdun Xiaolianyouchang he Guifang Yuanyou Chengpingyou Liutong Zhixu de Yijian], issued by the State Economic and Trade Commission of the P.R.C. in 1998.

[453] "Notifications Regarding Regulating the Distribution of Oil", The Ministry of Railway, 2003/150, 2003 [关于加强石油运输管理的通知]

[454] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 122-210.

[455] "Regulation of the PRC on the Administration of the Import and Export of Goods," Issued by the State Council Jan 1st, 2002, [Huowu Jinchukou Guanli Tiaoli]
http://oilsyggs.mofcom.gov.cn/article/gjzcfg/shangwubu/201310/72621_1.html

[456] "Opinions Regarding Regulating Small Refineries and the Distribution of Crude Oil and Processed Oil" (the so-called Doc. No. 38), issued by the State Economic and Trade Commission of the P.R.C. in 1998.

(vii) Although POEs are allowed to process crude oil and to sell processed oil at retail, the number of POEs in the petroleum sector is declining rapidly.[457]

Regulatory advantages may be found in pricing control although price control has been relaxed relatively over the time. For instance, the prices of crude oil and processed oil have gradually switched from government-set prices to government-guided prices, under which SOEs can set prices within the range decided by the government.[458] After 2008, the two giant SOEs enjoyed monopolistic profits since the guided prices for domestic sales of oil were set higher than world prices.

Financial advantages enjoyed by SOEs can be found as follows. Taking Sinopec as an example, in March 2008, Sinopec received a subsidy of $1.74 billion, which was included as part of the company's revenues for 2007 and 2008.[459] All the subsidies in 2008 and 2007 were granted for the price difference between crude oil and processed oil since the price of processed oil was higher than the price of crude oil, and for Sinopec's supply of processed oil to meet domestic market demand.[460] No explanations were given for the subsidies in 2009 and 2010. Subsidies in 2012 and 2011 were cash grants and tax refunds with conditions unknown to the public that Sinopec needed to meet.[461] Subsidies in 2013 and 2014 were cash grants and tax refunds (other than income tax refunds) without conditions.[462] Sinopec Corp received a subsidy of RMB 50.9 billion in 2008 to cover losses caused by the government's price control on fuels, which prevented Sinopec from raising retail prices as global crude oil prices increased.[463] Sinopec Corp. enjoyed tax refunds of

[457] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 83-101.
[458] "Reform Proposals on the Pricing of Crude oil"[Yuanyou Chengpingyou Jiage Gaige Fang'an], Former NDRC, 1998/52, 1998. It gives 5% of discretion to the 2 SOEs regarding pricing. After May 2009, it is 8% of discretion. The price of refined oil is capped under the guided "ceiling price" decided by NDRC. Pricing for gas is also under government "guidance". The current pricing mechanism for onshore natural gas is "cost plus" to determine "the benchmark ex-factory price" of gas, which is adjusted once a year. There are no relevant rules on the ex-factory price of offshore natural gas. *See* Interim Administration Measures for Oil Prices (Fa Gai Jia Ge 2009/1198).
[459] "Interfax. 2008a", China Energy Report Weekly, March 20-26.
[460] Annual report of 2008 and 2007 of Sinopec.
[461] Sinopec's Annul Financial Report 2011.
[462] Sinopec's Annul Financial Report 2013.
[463] Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 4. Citing FN 75.

about RMB 1.5 billion in 2010.[464] In 2015, Sinopec received subsidies of about RMB 500 billion, ranking at the top among all companies getting subsidies.[465]

Taking PetroChina as an example, in 2008, PetroChina announced that its profits for the year were mostly from government subsidies and import-tax rebates.[466] PetroChina received subsidies of about RMB 15,700 million for supplying crude oil and processed oil to meet domestic demand.[467] No explanations were given for the subsidies in 2010 and 2009. PetroChina in 2014 and 2013, 2012 and 2011 received subsidies for its gas input, which was imported from abroad at a price higher than the domestic price designated by the state. This subsidy remains from Jan 1st, 2011 to the end of 2020.[468] In 2015, PetroChina received subsidies of around RMB 480 billion, ranking second among all companies getting subsidies. [469]

Taking CNOOC as an example, the Chinese Government has helped CNOOC to acquire contracts to control foreign-energy reserves, and CNOOC heavily relies on subsidized financing from the SASAC.[470]

In contrast, POEs in the processing oil sector never received any subsidies for their activities of processing oil.[471]

[464] Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 78-84.
[465] Qing Ze, "How are subsidies granted to SOEs?" JING55, Nov.20, 2014. http://www.jing55.com/toutiao/20141120/210e8b75dae30d5e72189.html ; "Ranking of SOEs Receiving Subsidies: each SOE received 50 million RMB and Sinopec ranked as the top one," Vision Times, April 27, 2016. http://m.secretchina.com/node/606307
[466] "Interfax. 2008b", China Energy Report Weekly, August 28-September 3.
[467] Annul Financial Report 2008 of PetroChina, released to Shanghai Stock Exchange.
[468] Annual report of CNOOC.
[469] "Ranking of SOEs Receiving Subsidies: each SOE received 50 million RMB and Sinopec ranked as the top one," Vision Times, April 27, 2016. http://m.secretchina.com/node/606307
[470] Usha C.V. Haley and George T. Haley, *Subsidies to Chinese Industry, State Capitalism, Business Strategy, and Trade Policy* (Oxford Uni. Press, 2013), 32.
[471] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 39-63.

Table 17 Examples of Subsidies Received in the Petroleum and Petrochemical Industry from 2007 to 2014

(Unit: million RMB)

Name of the company	Sinopec Ltd. (a subsidiary of Sinopec Group)	PetroChina (a subsidiary of CNPC)
SOE or POE	SOE	SOE 87%
Revenue in 2014	2,825,914	2,282,962
Subsidies in 2014	3,165	10,931
Subsidies in 2013	2,368	10,347
2012	2,926	9,406
2011	1,497	6,734
2010	1,300	1,599
2009	1,042	1,097
2008	50,342	16,914
2007	33,790	1,197
Gross subsidies	96,430	58,225

In summary, in the petroleum and petrochemical sector, three giant SOEs are granted absolute monopolies with only a minor portion of the market open to POEs. The three SOEs monopolize vertically. Large financial advantages were granted to the three SOEs, particularly two of them each year. Most of the financial advantages were granted to the giant SOEs with no reasons given or with titles specifically tailored to them. POEs almost never got any financial advantages from the government. SOEs also enjoy monopolistic profits along with regulatory advantages from the government's price control.

d. The Shipping and Shipbuilding Industry

In the shipping and shipbuilding industry, data suggests that the top three SOEs accounted for 61 percent of revenues.[472] Investment data indicates the state sector accounted for approximately three-quarters of urban fixed investment in 2009 in the shipping and shipbuilding industry.[473] For instance, China Ocean Shipping Group (COSCO Group), an SOE, has 8 subsidiaries listed on stock exchanges in Hongkong, Shanghai, Singapore, Shenzheng, and so on.[474] China State

[472] Data is obtained from the firm Datamonitor.
[473] Table V-6: Top SOE share of revenues in China's shipping industry, 2010 in Usha C.V. Haley and George T. Haley, *Subsidies to Chinese Industry, State Capitalism, Business Strategy, and Trade Policy* (Oxford Uni. Press, 2013).
[474] *See* the association of the Shipping Industry

Shipbuilding Corporation (hereinafter CSSC Group), an SOE, has three listed companies and other subsidiaries that are not publicly traded.[475]

SOEs receive a lot more financial advantages than POEs. Yangzijiang Shipbuilding Holdings, which is a POE listed on the Taiwang Stock Exchange, received subsidies less than SOEs like COSCO Shipping Ltd., and China CSSC Holdings Limited, taking into account their operational income. (See Table 18 below.)

In the shipping industry, the government imposes the concentration strategy to solve the overcapacity, resulting in four large SOEs focusing on the different businesses of shipping containers, port business, financial services for shipping, and gas/oil shipping.[476]

Table 18 Examples of Subsidies Received in the Ship and Shipbuilding Sector from 2007 to 2014

(Unit: million RMB)

Name of the company	CSSC Holdings	COSCO Shipping Co., Ltd.	Yangzijiang Shipbuilding Holdings
SOE or POE	SOE 62%	SOE 51%	POE
Revenue in 2014	28,324	7,663	15,354
Subsidies in 2014	160	192	275
Subsidies in 2013	611	2.7	321
2012	129	1.9	326
2011	154	16	0
2010	171	3.7	0
2009	275	9.2	6.7
2008	412	700	0
2007	190	0	0
Gross subsidies	2,102	926	929

http://www.cansi.org.cn/index.php/Information/detail?id=363

[475] "China State Shipbuilding Corp.", *Global Security Org.*, http://www.globalsecurity.org/military/world/china/cssc.htm *See* the website of the company, available at http://www.cssc.net.cn/en/

[476] Xiaofeng Zhang & Xiaoyu Ren, "Realization of Ten Experiments in SOE Reform, and the Steel and Other Six Industries will Face New Opportunities", *Finance China*, Feb 27, 2016. http://finance.china.com.cn/stock/zqyw/20160227/3603626.shtml

In summary, SOEs dominate the shipping and shipbuilding sector. SOEs received more financial advantages than POEs.

e. The Telecommunications Sector

The telecommunications sector was previously operated by administrative agencies. Prior to 1993, all public telecommunications networks and services in Mainland China were controlled and operated by the state through the Ministry of Posts and Telecommunications. China Telecom was separated from the administrative agency of the telecommunications department in 1995. After 1994, a couple of SOEs were established in exclusive control of all businesses relating to telecommunications. Through mergers and restructuring, the number of SOEs increased to seven in 1999 and then reduced to six in 2002, and then to four giant SOEs in 2005.[477] The three top SOEs (China Mobile, China Telecom and China Unicom) account for more than 95 percent of revenues in the telecommunications sector, and China Mobile alone had market share of 62.1% at the end of 2014.[478]

SOEs are monopolies in law or in fact. Licenses are required by law to provide telecommunications services, which are composed of two categories, i.e., basic telecommunications business and value-added telecommunications business. In terms of the basic telecommunications business, in addition to a high threshold of capital, it is required by law that state ownership (state-owned equity or shares) shall not be less than 51% in the enterprise providing the basic telecommunications business.[479] It grants monopolies or oligopolies to SOEs for the basic telecommunications business by law. Hence, China Mobile, China Telecom and China Unicom are monopolies granted by the law since individuals are prohibited by law from entering the business of basic telecommunications.[480] In terms of the value-added telecommunications business, although there

[477] Jiagui Chen, Research on the 30 Years of China's Stat-owned Enterprise Reform, eds. Zheng LV and Sujian Huang (China: Economy & Management Publishing House, 2008), 319.
[478] Annual Report of China Mobile Limited, 20-F Form (2014).
http://www.chinamobileltd.com/sc/ir/reports.php
[479] Article 7, 8, and 10 of "Regulation on Telecommunications of the People's Republic of China," Decree of the State Council of the P.R.C (No. 291), adopted at the 31st regular meeting of the State Council on September 20, 2000.
a Chinese version http://www.miit.gov.cn/n1146295/n1146557/n1146619/c4860613/content.html
for an English version,
http://www.lawinfochina.com/display.aspx?lib=law&id=1667
[480] Although there is a little bit relaxation recently in the telecommunication sector in that POEs can contract with SOEs to retail sell some packages of services products through outsourcing, both China Telecom and China Unicom

is no requirement of state ownership in this regard, a license is required and the threshold for getting the license is high for POEs to meet, resulting in de facto monopolies or oligopolies by SOEs in the value-added telecommunications business.

The SOEs benefit from regulatory advantages in that price control remains. Formerly, the government regulated prices in the form of government-set prices. Over the time, regulated prices switched into the government-guided prices that allow SOEs to set prices within the designated range. Although the range of discretion is becoming larger and some market prices are allowed for certain services over the time, the monopolistic SOEs enjoy monopolistic profits.

Significant financial advantages were granted to the monopolistic SOEs.[481] (See Table 19 below). For instance, China Telecom enjoyed taxes foregone of about RMB 47 million in 2010.[482] No comparison of financial advantages granted to SOEs with that to POEs could be made due to the legal monopolistic status of SOEs in the telecommunications sector.

Table 19 Examples of Subsidies Received in the Telecommunications Sector from 2007 to 2014

(Unit: million RMB)

Name of the company	SOE or POE	Revenue in 2014	Subsidies in 2014	Subsidies in 2013	2012	2011	2010	2009	2008	2007	Gross subsidies
China Unicom	SOE 63%	288,571	271	239	123	118	112	141	63	4,055	5,123
China Mobile	SOE	641,448	582	471	331	310	417	73	312	413	2,909

In summary, SOEs are granted monopolies by law in the basic telecommunications services, and SOEs enjoy in fact monopolies or oligopolies in the value-added telecommunications services. Hence, the top three SOEs are almost in absolute control of the telecommunications service sector.

are full-service telecommunications services providers exclusively. *See* China Mobile's Form 20 F (2014) filed to the U.S. Security Exchange Commission.

[481] Form 20 F of China mobile limited filed to the U.S. Security Exchange Commission. http://www.sec.gov/Archives/edgar/data/1117795/000119312514158810/d711555d20f.htm

[482] Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 78-84.

The top three SOEs enjoy significant financial advantages. In additions, the top three SOEs benefit from monopolistic profits due to regulatory advantages such as governmental price control policies.

(2) Pillar Industries

In China, the pillar industries are defined based on the following criteria: i) the degree of an industry's contribution to the national defense, ii) the degree of an industry's contribution to job creation, iii) whether the industry involves technology acquisition and innovation, and iv) the extent of an industry's competitive advantage.[483] The list of industries designated as the pillar industries may vary over the time. Fifteen industries were designated as pillar industries promulgated in China's Tenth and Eleventh Five-Year Plans.[484] Among the pillar industries, the state maintains a controlling stake in key enterprises, usually SOEs.[485] China maintains a policy to develop advanced machinery manufacturing, optimize natural-resources processing, and upgrade consumer goods industries.[486] The Government continues to employ measures to "guide" resources into certain sectors of the economy, through granting various advantages.

a. The Automotive Industry

The top SOEs---the so called the "big four" Chinese automakers, namely Shanghai Automotive Industry Corporation (hereinafter SAIC), [487] Chang'an motors, First Auto Works Group

[483] Individual provinces also have their own SASACs and may designate their own pillar industries for provincial development apart from the central list. George Haley, "State-owned enterprises: Vehicles of industrial policy implementation", Expert testimony to U.S. China Economic and Security Review Commission's Hearing "China's Industrial Policy and Its Impact on U.S. Companies, Workers and the American Economy," Washington, DC, March 24, 2009.

[484] The pillar industries are 1) aerospace, 2) autos and auto parts, 3) banking and insurance, 4) biotechnology, 5) computer chip design and manufacture, 6) computing and computer hardware, 7) information technology, 8) iron and steel, 9) logistics, shipping, and storage, 10) machinery and mechanical equipment, excluding "general machinery basic components" and "food-processing and packaging machinery" industries. 11) oil and petrochemicals, 12) software, 13) telecommunications and telecom equipment, 14) utilities and power equipment, and 15) wholesaling and retailing.

[485] SASAC Guiding Opinion issued on December 5, 2006.

[486] Chapter 9 of China's 12th Five-Year Plan (2011-2015).

[487] SAIC is China's largest automaker by sales. A Fortune Global 100 company (60th largest in the world) http://500q.jigouba.cn/i/i/c.html

(hereinafter FAW)[488] and Dongfeng Motors---dominate the automotive sector, accounting for approximately 75% of China's automotive production in 2010.[489] Local governments also own lots of local SOEs in the automotive industry.[490] Privately-owned automotive companies are far smaller than the SOEs. For instance, SG Automotive Group is a listed POE on the stock exchange with revenues of RMB 4 billion in 2014 for the whole corporate group. In contrast, the revenues of SAIC Ltd., which is merely one subsidiary of the SAIC group (an SOE) to be publicly traded on the stock exchange, were RMB 563 billion in 2014. Industry restructuring through mergers and acquisitions in the automobile industry is encouraged and supported by the government.[491]

As for the auto-parts industry,[492] it previously remained highly fragmented with at least 20,000 companies, with SOEs accounting for 4 percent and POEs accounting for 44 percent. A merger and consolidation strategy began in 1980s. For instance, large-scale SOEs integrated the input factories with processing factories, and integrated upstream sectors with downstream sectors in the auto industry in 1981. [493] Hence, large SOEs are vertically integrated auto groups and conglomerates. SOEs, like SAIC, First Auto Works (FAW) Group, and Dongfeng Motors also became dominant in the auto-parts sector.

Both POEs and SOEs received significant financial advantages in the automobile and auto-parts sectors. POEs received subsidies from local governments. [494] (See Table 20 below). The value of subsidies made available to auto and auto parts manufacturers in China between 2009 and 2011

[488] FAW has three publicly traded subsidiaries: FAW Car Company, Tianjin FAW Xiali Automobile Co Ltd., and Changchun FAWAY Automobile Components Co Ltd.
[489] Data is from the China Association of Automobile Manufacturers; it is about 52% in 2014, *see* China-Britain Business Council, "Report: The Automotive Market in China," 2015 EU SME Centre, (2015), 13. http://www.ccilc.pt/sites/default/files/eu_sme_centre_sector_report_-_the_automotive_market_in_china_update_-_may_2015.pdf
[490] For instance, Anhui provincial government owns Chery, the Liaoning provincial government owns Brilliance Automotive, Xiaoshan municipal government partially owns the Wanxiang Group. Shanghai car companies and Nanjing car companies are municipally owned. Independent Auto-parts companies: Wanxiang, Chery and Geely,
[491] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, summary, pp. 35, 58, 61, 63, 72, 73, 114, 121.
[492] Auto parts include those used by original equipment manufacturers and aftermarket parts. Original equipment parts go into the assembly of new motor vehicles.
[493] Jiagui Chen, *Research on the 30 Years of China's Stat-owned Enterprise Reform*, eds. Zheng LV and Sujian Huang (China: Economy & Management Publishing House, 2008), 65.
[494] The examples I found was SOEs, like SAIC, Dongfeng, and POEs, like Geely, Liaoning SG Automotive Group.

was at least 1 billion dollars.[495] Advantages include export subsidies promoting exports of autos and auto parts. In the face of the global economic recession, an Industry Revitalization Plan for the Automotive Sector was adopted for the period 2009-2011. Consumers in rural areas received financial assistance when they purchased new vehicles.[496] In 2009, the central government started to provide lump sum grants to consumers who bought new energy-saving or new-energy cars listed in a promotion catalogue.[497]

Local governments gave financial advantages to promote the purchase of products of local state-owned autos and auto-parts companies. For example, in July 2012, as China's auto sales declined, two Chinese cities, Chongqing and Changchun, started giving subsidies of around RMB 3000-7000 for each purchase of autos produced by local state-owned auto companies so that the companies could continue to expand. Some cash grants are only available to one particular SOE. For example, Chongqing's subsidy is only for Chongqing Chang'an Automobile Co. and Changchun's subsidy is only for FAW.[498]

Regulatory advantages can be found in that an automobile import licence is required, and the importation of used vehicles, parts and components is prohibited.[499]

[495] Office of the U.S. Trade Representative, "Fact Sheet: WTO Case Challenging Chinese Subsidies," 2012. https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2012/september/wto-case-challenging-chinese-subsidies

[496] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, p. 35, 58, 61, 63, 72, 73, 114, 121.

[497] Lump sum grants ranging from RMB 3,000 to 60,000 are granted depending on the model of cars. *See* Ministry of Finance, NDRC and MIIT, Circular/Notification on "The Project of Energy Saving Products Benefiting Consumers in respect of Energy-Saving Cars", 2010/219, effective May 26, 2010.

[498] From a legal perspective, these subsidies are SOEs specific. *See* J. Yang, "Why Cities' Subsidies Will Hurt Domestic Automakers in the Long Run?" Automotive News China, August 24, 2012.

[499] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, p. 35, 58, 61, 63, 72, 73, 114, 121.

Table 20 Examples of Subsidies Received in the Auto Industry from 2007 to 2014

(Unit: million RMB)

Name of the company	SOE or POE	Revenue in 2014	Subsidies in 2014	Subsidies in 2013	2012	2011	2010	2009	2008	2007	Gross subsidies
Dongfeng Motor	SOE	17,471	31	78	330	26	47	100	51	13	676
SAIC Motor Corp. Ltd.	SOE 81%	563,346	2,672	1,390	762	328	105	226	80	12	5,574
Geely Automobile Holdings Ltd.	POE	3,963	898	800	870	877	640	216	203	0	4,505
SG Automotive Group Co., Ltd	POE	4,057	240	111	276	49	24	18	18	8	744

Note: POEs in the table seem to receive more subsidies than SOEs taking into account the ratio of subsidies to revenues. It is partially because that local governments give significant subsidies to their local auto companies, including POEs. Except from that, it might also be that some information of granting financial advantages to SOEs are not open to the public as such that what I found was only a portion of the whole financial advantages granted to SOEs. Nevertheless, given that SOEs dominate the sector, most of the beneficiaries from subsidies are SOEs.

In summary, SOEs dominate the automobile industry, as well as the auto-parts industry. Both POEs and SOEs receive significant financial advantages in the automobile and auto-parts sectors. Local governments play a significant role in giving subsidies in this regard. Importation of automobiles and used auto-parts is strictly restricted, which benefits both SOEs and domestic POEs. Nevertheless, given that SOEs dominate the sector, most of the beneficiaries from financial advantages and regulatory advantages are SOEs.

b. The Steel Industry

In pursuance of its consolidation strategy in the steel industry, the Chinese Government has chosen Bao-Steel, Beijing Shou-Steel, Tangshan Iron and Steel, Anben-Steel, and Wu-Steel as leaders.[500] The central and provincial governments hold majority interests in almost every major Chinese steel producer. Eight of the ten largest Chinese steel companies are 100 percent owned or controlled by the Chinese Government, and 19 of the top 20 steel companies are majority owned

[500] George Haley, "Overview of China's pillar and strategic industries," Expert testimony to U.S.-China Economic and Security Review Commission's hearing, "the Extent of the Government's Control of China's Economy, and Its Impact on the United States," May 25, 2007.

or controlled by the government. In terms of production, 91% of the production of the top 20 steel companies is produced by SOEs.[501] SOEs were responsible for 64 percent of gross output in the "smelting and pressing of ferrous metals" industry in 2009 and 50 percent of urban fixed asset investments in relation to steel.[502] In 2010, 35% of the gross output of the iron and steel subsector was contributed by SOEs.[503] The government shut down many small-and-medium sized firms, and there are now only a few small-and-medium sized POEs in existence in the steel industry.[504]

The steel industry as a whole receives significant financial advantages. Research has found that energy subsidies (coal, natural gas, and electricity) to the Chinese steel industry from 2000-2007,[505] fell in 2002 and 2003, immediately after China joined the WTO. However, the subsidies surged in 2004, and have continued to grow since then, corresponding to China's rise as the largest producer and exporter of steel in the world.[506] Sha-Steel (a POE) received subsidies for its R&D, and cash grants specifically for it without explanations.[507] Even the small companies expressed confidence in their ability to obtain financing, including financial advantages from the state.

The largest SOEs in the steel industry, such as Bao-Steel, Wu-Steel and An-Steel have the central government's support for their operations and expansion. Research has found that the leading Chinese steel producers, all of which are SOEs, received more than RMB 393 billion in

[501] Alan H. Brice, Timothy C. Brightbill, Christohper B. Weld, and D. Scott Nance, "Money for Metal: A Detailed Examination of Chinese Government Subsidies to Its Steel Industry," Prepared for the American Iron and Steel Institute (AISI), the Steel Manufacturers Association (SMA), the Committee for Pipe and Tube Imports (CPTI), and the Specialty Steel Industry of North America (SSINA), (July 2007), 10.
http://www.wileyrein.com/resources/documents/fm14037.pdf
[502] Data is from the China Statistical Yearbook, 2009.
[503] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012.
[504] Joint Announcement by MIIT and NEA (MIIT Announcement 2011/36) on 29 October 2011.
http://www.miit.gov.cn/n11293472/n11293877/n13138101/n13138118/14323368.html.
[505] Usha C.V. Haley and George T. Haley, *Subsidies to Chinese Industry, State Capitalism, Business Strategy, and Trade Policy* (Oxford Uni. Press, 2013).
[506] Alan H. Brice, Timothy C. Brightbill, Christohper B. Weld, and D. Scott Nance, "Money for Metal: A Detailed Examination of Chinese Government Subsidies to Its Steel Industry," Prepared for the American Iron and Steel Institute (AISI), the Steel Manufacturers Association (SMA), the Committee for Pipe and Tube Imports (CPTI), and the Specialty Steel Industry of North America (SSINA), (July 2007).
[507] Annual Financial Report of Jiangsu Shagang Group Co., Ltd.

subsidies.[508] The subsidies include RMB 130.9 billion in preferential loans and directed credit,[509] and RMB 141 billion in equity infusions and/or debt-for-equity swap. At least 37 Chinese steel companies including all the major producers, have benefited from land-use discounts totaling RMB 38.9 billion, since SOEs enjoy land-use rights at no charges or at as little as US$ 0.02 per square foot.[510] SOEs benefited from government-mandated mergers as the Chinese Government directed the consolidation of the steel industry in China by permitting acquisitions at little or no cost. For example, in May 2007, Bao-Steel, China's second largest steel producer, received a 48.5 percent stake in Xinjiang, worth more than RMB 6 million, at no cost.

To take another example of subsidization, Wuhan Iron and Steel Ltd. (one subsidiary of Wu-Steel) received subsidies from 2007 to 2014 in the form of cash grants, subsidies for interest on loans, subsidies for environmental friendly projects and resource-saving projects, and subsidies for specific steel construction projects. Inner Mongolia Steel (an SOE) received similar subsidies in addition to tax refunds, subsidies for its construction of a building, partial refunds of land-use fees, and subsidies for electricity costs.

In addition to financial advantages from the central government, local governments support local SOEs, providing financial advantages to build or to keep their steel industries for the purpose of getting profits and taxes, and ensuring access to raw materials.[511]

SOEs also benefit from regulatory advantages.[512] Small-and-medium sized privately-owned steel producers are forced to shut down. For instance, the Steel Industry Revitalization Plan set the goal of closing down enterprises with smaller production capacity or out of date equipment, through the revocation of permits and licences concerning production, safety, the use of sewage, or

[508] Alan H. Brice, Timothy C. Brightbill, Christohper B. Weld, and D. Scott Nance, "Money for Metal: A Detailed Examination of Chinese Government Subsidies to Its Steel Industry," Prepared for the American Iron and Steel Institute (AISI), the Steel Manufacturers Association (SMA), the Committee for Pipe and Tube Imports (CPTI), and the Specialty Steel Industry of North America (SSINA), (July 2007), 25.
http://www.wileyrein.com/resources/documents/fm14037.pdf
[509] *Id*.
[510] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, summary.
[511] Directorate for Science Technology and Industry Steel Committee 2006.
[512] Trade Policy Review: China, Trade Policy Review Body, Report by the Secretary, Executive Summary, WT/TPR/S/264.

suspension of power supplies.[513] Regulations also limited the number of approvals for new investment in the steel sector so as to strictly control new production capacity.

The steel industry also receives benefits flowing from other sectors. There are three types of such benefits: i) SOEs in the coal industry receive advantages from having better access to railways *for transporting coal used for generating electricity*, the steel industry receive better deals from the electricity companies for purchasing electricity directly rather than on-grid electricity; ii) SOEs in the coal industry receive advantages from having better access to railways for transporting coal used for producing steel;[514] and iii) the coal industry also got compensation specifically for supporting the steel industry by providing coal at lower prices, examples can be found in Pinding Shan Tian AN Coal Ltd. (an SOE).

Meanwhile, in 2016, the government announced that Bao-Steel and Wu-Steel will restructure and merge, another 12 central SOEs will be required to exit the coal industry, targeting 7 giant SOEs for improving their competitiveness in the coal and steel industries.[515]

[513] For details *see* MIIT Circular on the Implementation Plan for Elimination of Backward Production Capacity (2011/46, 26 Jan. 2011). Joint Announcement by MIIT and NEA (MIIT Announcement 2011/36) on 29 October 2011. http://www.miit.gov.cn/n11293472/n11293877/n13138101/n13138118/14323368.html.

[514] "Railway authority in Ha'er bing Province adopted policy to secure that coal is transported to markets in order to reduce pressure from high demand for electricity nationwide," June 11, 2016. http://nlhw.bgzxv.com/gjzj/9262.html ; "The Ministry of Railways stated that railways will undertake the task of transportation for coal as long as there are markets demanding for coal," *China News*, July 2, 2016. http://alt.823veyo.com/fctkzc/3236.html ; "SOEs in the Coal Industry and SOEs in the Electricity Industry are the major source of selling coal, and PingCoal (an SOE) makes profits at the amount of trillions RMB per year", *blog, the Chinese Times*, March 6, 2010. http://blog.sina.com.cn/s/blog_5efc3eed0100hkmq.html "The Railway Department Guarantees the Transportation of Coal," Guangming Newspaper, Nov. 19, 2011.
http://epaper.gmw.cn/gmrb/html/2011-11/10/nw.D110000gmrb_20111110_6-10.htm

[515] "The Reform of the Steel and Coal industry focuses on becoming stronger and larger", July 21, 2016, http://www.cnwnews.com/html/biz/cn_sypl/20160721/816015.html

Table 21 Examples of Subsidies Received in the Steel Industry from 2007 to 2014

(Unit: million RMB)

Name of the company	SOE or POE	Revenue in 2014	Subsidies in 2014	Subsidies in 2013	2012	2011	2010	2009	2008	2007	Gross subsidies
Wuhan Steel	SOE 66%	99,373	340	227	345	30	33	29	57	22	1,082
BaoSteel	SOE 51%	29,792	13	9	37	27	1	0	3	20	109
Jiangsu Shagang Ltd.	POE	10,308	9	10	44	35	2	0.11	1	5	106

In summary, benefiting from government assisted mergers and acquisitions, large SOEs along with a dozen of SOEs dominate the steel industry. The whole steel industry benefits from the various advantages granted by the government, such as land-use discounts, and electricity fees discounts. Giant central SOEs receive financial advantages both from the central and local governments, and local SOEs receive significant financial advantages from local governments. Nevertheless, most beneficiaries of various advantages are SOEs in light of SOEs' dominant presence in the steel industry.

c. The Non-ferrous Metals Sector

The non-ferrous metals sector was transformed from one with diversity of ownership to one dominated by SOEs. The state sector accounted for 45 percent of gross output of non-ferrous metals in 2009 and 32 percent of fixed urban investment in non-ferrous metals.[516] Due to the consolidation strategy, the central government maintains control over the non-ferrous metals industry through three groups of SOEs, including Aluminum Corporation of China Limited (hereinafter Chalco) and China Nonferrous Metal Mining Group (hereinafter CNMC).[517] Chalco alone is said to hold a 25 percent market share in the domestic production of aluminum, plus an additional six percent gained from selling aluminum produced by other companies.[518] Other major

[516] Data is from the China Statistical Yearbook, 2009.
[517] There are three groups of SOEs in non-ferrous metals sector. One is Guangshen Group, one is Wukuang Group and another is SOEs doing research and are subject to SASAC.
[518] Su Aik Lim, "Fitch Affirms Chalco at 'BBB+' " Outlook Stable, Hong Kong, June 1, 2011.

SOEs, such as China Minmetals Corporation, play a role in the aluminum sector as well.[519] After consolidation, the rare earths sector is in fact controlled by six giant SOEs, through production or exploitation permits, production or extraction quotas, and the shutting down privately-owned small-scale enterprises.[520]

SOEs receive more financial advantages than POEs, taking into account their revenues. Chalco received subsidies for its electricity costs in the amount of RMB 518 million, 545 million and 560 million in 2014, 2013 and 2012, accounting for two third of all subsidies it received during the respective years. In addition, it received a subsidy targeted only for its development, and subsidies related to R&D and environmental issues. Chalco's balance sheet indicates that the firm saved RMB 37 million in 2010, and benefitted from RMB 92.4 million in tax credits for purchasing certain domestic equipment in 2008, though this program was abolished in a response to a WTO investigation into China's tax regime. [521]

China Non-ferrous Metal Industry's Foreign Engineering and Construction Co. Ltd. (an SOE) received subsidies for its electricity costs in 2014 and 2013, and subsidies for export insurance in 2010. Sichuan Honda, an SOE, received subsidies in the amount of RMB 9 million and RMB 0.7 million for its electricity costs in 2014 and 2013, and benefited from foregone taxes on its right to use land in 2011, equivalent to the amount of RMB 1 million.[522] There are subsidies for imported products for both POEs and SOEs.[523]

[519] Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 44-48.
[520] From the list of companies who are eligible to enter this industry of rare earths, they are mainly SOEs.
[521] Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 78-84.
[522] The above data are from annual reports of the enterprise which is publicly traded on stock exchanges.
[523] Here is several example of companies that received subsidies for imported goods: Sichuan Hongda, Zhejiang Hailiang Co., Ltd, Aluminum Corporation of China Limited, China Nonferrous Metal Industry's Foreign Engineering And Construction Co., Ltd.

Table 22 Examples of Subsidies Received in the Non-Ferrous Metals Sector from 2007 to 2014

(Unit: million RMB)

Name of the company	SOE or POE	Revenue in 2014	Subsidies in 2014	Subsidies in 2013	2012	2011	2010	2009	2008	2007	Gross subsidies
Aluminum Corp. of China Ltd. (ADR) (one subsidiary of Chalco)	SOE 47	141,772	824	824	745	186	329	151	101	47	3,206
China Nonferrous Metal Industry's Foreign Engineering and Construction Co., Ltd. (one subsidiary of CNMC)	SOE 34%	18,224	71	118	27	12	34	37	20	9	329
Hailiang Co. Ltd.	POE	12,061	16	7	12	30	46	39	13	11	174

In summary, several giant SOEs indeed enjoy monopolies in fact in sub-sectors of non-ferrous metals, due to the consolidation and concentration strategy. SOEs receive disproportionally more financial advantages than POEs. Subsidies for electricity fees are one major type of financial advantages granted to SOEs.

d. The Machinery and Equipment Sector

In the machinery and equipment sector,[524] the visible role of the state is relatively small in comparison with strategic and other pillar industries. The machinery and equipment sector accounted for about 19% of China's total industrial value added, and more than 9% of GDP in 2010.[525] The state share accounted for a combined 21 percent of China's gross output in the overall machinery and equipment industry in 2009.[526] In 2009, SOEs accounted for 17 percent of urban investment in fixed assets in the sector. Nevertheless, large SOEs are prominent in the railway subsector and manufacture of aircraft and components subsector.

[524] Based on the China Statistical Yearbook, there is some overlap between the machinery and equipment sector, on the one hand, and the information technology sector, on the other hand.
[525] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, summary.
[526] Data is from the China Statistical Yearbook, 2009.

The machinery and equipment sector is also encouraged by the industrial policy.[527] Manufacture of aircraft, aircraft parts and components, and other airborne equipment was listed in the "encouraged" machinery manufacturing sector in the Catalogue of Industrial Structure Adjustment. New-energy and energy-saving equipment were added to the 2011 version of the catalogue as "encouraged". In 2011, MIIT announced the Agricultural Machinery Development Policies with the aim of optimizing the manufacture of agricultural machinery.[528] Tax incentives are granted for manufacturing and R&D activities concerning agricultural machinery.[529] SOEs received more subsidies than POEs, with the exception that Sany Heavy Industry Co., Ltd., which also received significant financial advantages. (See Table 23 below.)

Table 23 Examples of Subsidies Received in the Machinery and Equipment Sector from 2007 to 2014

(Unit: million RMB)

Name of the company	SOE or POE	Revenue in 2014	Subsidies in 2014	Subsidies in 2013	2012	2011	2010	2009	2008	2007	Gross subsidies
China Avic Avionics Equipment Co., Ltd.	SOE 77%	6,607	45	51	22	37	3	8	3	31	100
CITI Heavy Industries Co., Ltd.	SOE 76%	4,021	95	149	100	59	Not IPO yet	Not IPO yet	Not IPO yet	Not IPO yet	403 for 4 years
Sany Heavy Industry Co., Ltd.	POE	23,367	380	694	577	937	95	30	25	18	2,756
Shanxi Meijin Energy Co., Ltd.	POE	115,577	0	0	0	0	1.2	0	0	0	1.2

In summary, although SOEs do not dominate the machinery and equipment sector in general, they dominate subsectors such as manufacture of railway and aircraft components. SOEs receive more

[527] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, summary.
[528] MIIT Announcement 2011/26, On 17 August 2011.
[529] WTO documents G/SCM/N/155/CHN and G/SCM/N/186/CHN, 21 October 2011.

financial advantages than POEs with some exceptions for large POEs that have close connections to the government. The sector is expanding and will be more likely to receive governmental support.

e. The Information Technology Sector

According to the China Statistical Yearbook, the state's role in the information technology sector is not very large. For example, SOEs accounted for only 9 percent of gross output and 11 percent of fixed investment in this sector in 2009.[530] The information technology sector[531] has been identified as a new strategic emerging industry, in which SOEs are expanding, although they are not in a predominant position. Reconstruction of SOEs is on the way in the IT sector. The largest IT company in China is China Electronics Corporation, which is a wholly-owned SOE. It has 15 subsidiaries that are publicly traded on stock exchanges, covering the entire electronics and information technology sector.[532]

Financial advantages are granted to SOEs. Examples can be found in the table below. Meanwhile, POEs also receive a lot of financial advantages due to the policies adopted by China to encourage development of the sector. For instance, the Circular on Certain Policies for Further Encouragement to Development of Software Industry and Integrated Circuit Industry, promulgated in 2011, further encourages development in the manufacturing of integrated circuits.[533] Under the Circular, eligible companies are accorded preferential tax treatment, including the business tax exemption, the enterprise income tax exemption and reduction for five years, and tariff exemptions for imported critical equipment.[534]

[530] Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 44-48.
[531]The information technology sector includes the electronics industry, which covers communication equipment, computers and other electronic equipment.
[532] Hehui XIn, "Which IT segment will benefit from the undergoing reform of SOEs," Jan 23, 2016, https://www.xinhehui.com/zt-gptzjq/view-43187.html
[533] State Council Circular 2011/1.
[534] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, summary. For detailed information on tax preference for the manufacture of integrated circuits, *see* WTO documents G/SCM/N/155/CHN and G/SCM/N/186/CHN, 21 October 2011.

Table 24 Examples of Subsidies Received in the Information Technology Sector from 2008 to 2015

(Unit: million RMB)

Name of the company	SOE or POE	Revenue in 2015	Subsidies in 2015	2014	Subsidies in 2013	2012	2011	2010	2009	2008	2007	Gross subsidies
China Electronics Corp. Holdings Ltd.	SOE	1080	95	61	26	26	24	16	33	15	No data	296
Jilin Sino Microelectronics Co., Ltd	POE	1,236	12	14	6	23	53	0.2	29	5	(2)	142.2

In summary, SOEs' role in the information and technology sector is not very large. Nevertheless, SOEs are expanding in this sector. SOEs receive disproportionally more financial advantages than POEs, including cash grants, tax exemptions, tariff exemptions for imported critical equipment, subsidies for electricity fees, subsidies for electrical business and etc. It is believed that this sector will receive more support from the government in the future, which will benefit SOEs over POEs.

3.2 The Nature of Advantages Granted to Chinese SOEs

3.2.1 The Nature of Financial Advantages associated with SOEs

(1) SOEs as Givers of Financial Advantages

a. SOEs Give Capital Input to Other SOEs

In addition to the financial advantages from the government, SOEs also receive financial advantages from state-owned banks (SOBs) and other SOEs. Statistics have found that SOBs favor SOEs over POEs.[535] An OECD study noted that the total factor productivity of POEs is approximately twice that of SOEs, while SOEs continue to receive a disproportional share of

[535] Bank lending is biased in favor of SOEs. For instance, if the SOEs' share in City A is higher than City B by one percent, then the growth in loan/output ratio in City A will be higher by 0.34 percent. *See* Shang-Jin Wei and Tao Wang, "The Siamese Twins: Do State-Owned Banks Favor State-Owned Enterprises in China?" China Economic Review Volume 8(1) 1997, 19-29.

credits.[536] The average debt-to-equity ratio of SOEs was roughly 1.6 while it was below 0.8 for private firms in 2015. SOEs receive low-cost capital from SOBs through easy access to loans (loans to uncreditworthy enterprises), [537] low interest rates, [538] non-pay back loans, and export promotion loans.[539]

SOBs give benefits to SOEs by lending at below-market interest rates.[540] It was found that SOEs paid an average annual interest rate of 1.6 percent from 2001 to 2008, while private companies during the same period paid 5.4 percent.[541] Sinopec's weighted average interest rate on short-term loans (i.e., loans with duration of one year or less) was 2.7 percent in 2010, much lower than the market rate of 5.36%.[542] China Southern Airlines with high debt levels reported an interest rate of 1.13 to 1.97 percent in 2010. China Southern Airlines has a credit line with the government-owned Agricultural Bank of China.[543] China Telecom Limited obtained nearly all of its RMB 20.7 billion short-term borrowings in 2010 from its parent SOEs or SOBs, with interest rates ranging from 3.5 percent to 5.8 percent, while the borrowing rate from its SOE parent was as low as 3.9 percent.[544] CNOOC's weighted average interest rate for 2010 was 3.4 percent.[545] In 2012, China Coal Energy

[536] OECD, "Economic Survey of China 2005", (Sept. 16, 2005), 86; OECD, "China in the Global Economy: Governance in China" (2005), 140.
[537] Paul Saulski, "Panel II: The Competitive Challenges Posed by China's State Owned Enterprises," Hearing on "Chinese Stat-Owned and State-Controlled Enterprises", Testimony before the U.S.- China Economic and Security Review Commission (Feb. 15, 2012), 2-3.
http://www.uscc.gov/sites/default/files/2.15.12saulski_testimony.pdf ;Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 55.
[538] Terence P. Stewart, et al., "China's Support Programs for Automobiles and Auto Parts under the 12th Five-Year Plan", Law Offices of Stewart and Stewart, Jan. 2012, at 60; Elizabeth J. Drake, "Chinese State-Owned and State-Controlled Enterprises: Policy Options for Addressing Chinese State-Owned Enterprises," Testimony before the U.S. – China Economic and Security Review Commission (Partner, Law Offices of Stewart and Stewart, 15 Feb. 2012), 2.
[539] Report to the U.S. Congress on Export Credit Competition and the Export-Import Bank of the United States (June 2011), 113; Yang Wanli, "Sinohydro: Top Hydropower Engineering firm," China Daily, Oct. 20, 2009.
[540] Sebastian Claro, "Supporting inefficient firms with capital subsidies: China and Germany in the 1990s," Journal of Comparative Economics 34 (2006) 377-401, 378.
[541] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011).
[542] According to the China Information Center, the average of monthly prime lending rates in China from December 2009 to December 2010 was 5.36 percent. *See* Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 4. Citing FN82.
[543] Agricultural Bank of China. *ABC Signed the Bank-Enterprise Comprehensive Strategic Cooperation Agreement with China Southern Airlines.* Beijing, June 11, 2011.
[544] Annual Financial Report of China Telecom Corporation Limited, F-23 (2011).
[545] Annual Financial Report of CNOOC Limited, F-54 (2011).

Company borrowed RMB 278,860,000 and foreign currency of 3,817,440 from the Bank of China as a short-term loan with the interest rate of 2.28%, which was much lower than the market interest rate of 5-6%.[546] SOBs also give loans to uncreditworthy SOEs. In 2003, non-performing loans by SOEs at the four major SOBs amounted to more than 17 percent of China's GDP. [547] Many SOEs are kept from going bankrupt by getting generous loans from SOBs and the loans are not expected to be paid back in full and/or on time. [548] In 2003, new lending equaled almost one-quarter of GDP. Half of all bank loans went to SOEs, and most will never be repaid.[549]

In return, SOBs receive subsidies from the government for "bad" loans as a compensation for the difference between the interest rates given to SOEs and the market interest rate. The government gives subsidies for interest rates to SOBs, which would consequently give loans at low-interest rates to SOEs. Hence, financial advantages given by SOBs to SOEs are actually paid for by the government. However, the fact that banks receive subsidies is less transparent. For instance, some subsidies are categorized as savings or income of the main business rather than grants from the government. So it is uncertain how many subsidies are granted to banks to compensate them for lending to SOEs. Also, the SOB's subsidies to SOEs are less transparent than budgetary subsidies in terms of measurement and monitoring.[550]

(b) SOEs Give Other Inputs to Other SOEs

SOEs also receive financial advantages from other SOEs in terms of other inputs, such as raw materials, energy, oil, gas, metals, minerals, electricity, water, better access to railways, and other commodities and services.[551] It is typical in the chain from railway SOEs, to coal SOEs, to

[546] 2012 Annual report of China Coal Energy Company, submitted to the Shanghai Stock Exchange.
[547] Hejing Chen and John Whalley, "The State-owned Enterprises Issue in China's Prospective Trade Negotiations," *Centre for International Governance Innovation* (2014).
[548] Shang-Jin Wei and Tao Wang, "The Siamese Twins: Do State-Owned Banks Favor State-Owned Enterprises in China?" China Economic Review Volume 8(1) 1997, 19-29.
[549] Usha C.V. Haley and George T. Haley, *Subsidies to Chinese Industry, State Capitalism, Business Strategy, and Trade Policy* (Oxford Uni. Press, 2013), 33.
[550] Julia Ya Qin, "WTO Regulation of Subsidies to State-Owned Enterprises (SOEs)- A Critical Appraisal of the China Accession Protocol," Journal of International Economic Law 7(4), 863-919. citing FN 54.
[551] There are arm length transactions and transactions among related parties. SOEs frequently transact with related parties. In the energy sector and in vertically integrated operations, 12 percent of Sinopec Corp.'s sales and 7 percent of its purchases in 2010 involved related parties. Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 4; Elizabeth J. Drake, "Chinese State-Owned and State-Controlled Enterprises: Policy Options for Addressing

electricity SOEs, and all the way to steel/aluminum SOEs. Due to the relationship between upstream and downstream industries, benefits flow among them, for instance, the coal industry receives subsidies for providing coal at lower prices to the steel industry/electricity industry, to ensure that a certain supply of coal is available to be used in producing electricity/energy, to ensure a certain supply of coal is available to be used by the steel industry, to ensure certain supply of electricity to be used by the steel industry.

SOEs in the coal industry have better access to railways for transporting their coal, and the railways in China are operated by SOEs. POEs' access to railways for transporting their coal is limited. Evidence can be found in some cases where there are governmental policies explicitly directing the railway SOEs to give better access and allocation quotas to SOEs in the coal industry or steel industry. For instance, railways ministries and the National Development and Reform Commission made policies that coal used for electricity and for steel companies will be given priority in terms of transporting coal through rails.[552] Some railways services are reserved or allocated with priority to transporting coal. Such policies are mainly targeted at giant five electricity SOEs and large SOEs in the coal industry every year, and almost half of transportation services are used for transporting coal.[553] However, sometimes, it is hard to find such explicit evidence of government policies. With or without evidence showing that the government is involved, SOEs in the coal industry have better access to railways services provided by SOEs than POEs.

Chinese State-Owned Enterprises," Testimony before the U.S. – China Economic and Security Review Commission (Partner, Law Offices of Stewart and Stewart, 15 Feb. 2012), 2.

[552] "The Ministry of Railways stated that railways will undertake the task of transportation for coal as long as there are markets demanding coal," *China News*, July 2, 2016. http://alt.823veyo.com/fctkzc/3236.html

[553] "The Railway Department Guarantees the Transportation of Coal," Guangming Newspaper, Nov. 19, 2011. http://epaper.gmw.cn/gmrb/html/2011-11/10/nw.D110000gmrb_20111110_6-10.htm ; "SOEs in the Coal Industry and SOEs in the Electricity Industry are the major source of selling coal, and PingCoal (an SOE) makes profits at the amount of trillions RMB per year", *blog, the Chinese Times*, March 6, 2010. http://blog.sina.com.cn/s/blog_5efc3eed0100hkmq.html Datong Coal Industry Company Limited, and Shenhua Group (Energy company), and electricity SOEs, take advantage of their better access to transportations, especially railways, and better retail ability in markets, purchased coal from small coal miners at lower prices, and resell them at higher prices. POEs and small-and-medium sized enterprises have to spend a lot money in order to get their coal transported to markets by rails. What's more, they cannot get sufficient access to railways through money sometimes. (There are some administrative interventions in the allocation of railways services.) Therefore, they prefer selling their coal to the large SOEs who have better access to railways. Electricity SOEs also benefit in such a way as five giant SOEs in the electricity sector, including China Huaneng, and China Huadian Corp., all sell coal for profit, and such a business has been their focus. It is also because they take advantage of their better access to rails.

It is beneficial to SOEs in the steel industry since they have better access to railways for getting coal as the input, and for transporting their steel products. Increased prices of oil will significantly affect road transportation of coal for POEs in the steel industry since they have difficulty in getting their input of coal transported by rails.[554] Furthermore, the government gives subsidies to SOEs in the coal industry for low-priced coal provided to the steel industry.[555]

Taking coal as an input for an example, after the abolishing of dual prices for coal, electricity SOEs may approach coal miners to purchase coal at prices lower than market prices at large quantities. There may or may not be evidence of governmental policy that directing SOEs in the coal industry to provide coal at prices lower than market prices for the usage of generating electricity. The prices of coal used for electricity is different from the prices of coal used for non-electricity. Although the price difference is reducing after around 2008.[556]

Taking electricity as an input for another example, given that transmission of electricity is costly[557] and consumes energy as well, direct power purchase[558] is a way for large users to reduce transaction costs and get a better deal for lower prices of electricity. Electricity is a significant input for the steel, cement, glass, petrochemicals, non-ferrous metals, paper, and chemicals industries, which are energy-intensive, in that the cost of electricity accounts for 20% to 80% of the whole costs of such products. For instance, the steel companies may approach the electricity companies (SOEs) for direct power purchase at lower prices.[559] Many aluminum companies have approached electricity companies for direct power purchase. For instance, the power sector, which is dominated by SOEs, may provide electricity at a price lower than the market price since it is a

[554] "The Steel Industry: the Influence of Increased Price of Electricity on the Steel Industry", *Guotai Junan Securities*, June 23, 2008. http://money.163.com/08/0623/11/4F4C0QQG00251M00.html#
[555] Evidence can be found in the previous section about advantages given to the coal industry.
[556] "SOEs in the Coal Industry and SOEs in the Electricity Industry are the major sources of selling coal, and PingCoal (an SOE) makes profits in the amount of trillions RMB per year", *blog, The Chinese Times*, March 6, 2010. http://blog.sina.com.cn/s/blog_5efc3eed0100hkmq.html
[557] For instance, the cost of transporting electricity is more than 25% of the total if the distance is longer than 1500 kilometers.
[558] Direct power purchase is a transaction directly between the seller of electricity and buyer of electricity without an intermediary, with agreed prices which probably are lower than the prices of on-grid electricity purchases.
[559] Shuwei Zhang, "The Reform in Electricity Prices is More About the Pricing Mechanism, Rather Than Whether the Prices are Higher or Lower," *Energy*, June 11, 2014, http://energy.people.com.cn/n/2014/0611/c71661-25135482.html

government-set price.[560] Chalco claims that the government is currently pushing a policy that favors large smelters over smaller ones, which benefits Chalco by granting it preferential treatment in the allocation of raw materials and electricity supplies. It is conducted through policies that allow Chalco to purchase electricity directly from electricity producers (SOEs) at prices lower than market prices.[561] Many aluminum companies have their own electricity generators, through buying coal from the coal industry at lower prices.[562]

In addition, SOEs may refuse to deal with POEs. For example, it seems that the state-owned aviation fuel company offers less generous terms to service private passenger carriers, and the computerized reservation system refuses to book flights for private carriers.[563]

(2) SOEs Receive More Financial Advantages in Various Forms with Less Transparency

Combining existing research and my findings, the following can be observed. Although financial advantages granted to SOEs in different industries may vary in types, they typically receive: subsidies specifically for a project undertaken by the SOEs, or subsidies specific to the SOE, or specific to its factory; subsides for following government policy by providing low prices of products, such as coal to, mainly, other SOEs, such as the steel industry; tax refunds, exemption from natural resource taxes, import-tax rebates; subsidies for purchasing state bonds; price support; cash grants; subsidies for imported products when they are priced higher than domestic products; price controls on fuels to prevent prices from increasing; land-use discounts; tax credits for purchasing some domestic equipment; export subsidies or export insurance; subsidies for interest on loans; subsidies for electricity costs; energy subsidies (coal, natural gas, and electricity); and

[560] Jiagui Chen, Research on the 30 Years of China's Stat-owned Enterprise Reform, eds. Zheng LV and Sujian Huang (China: Economy & Management Publishing House, 2008), 319; Eight SOEs account for approximately 70 percent of revenue in the power sector. *See* the National Bureau of Statistics; State-owned and controlled firms account for more than 90 percent of output in 2009, *see* Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 44-48, (Table V-4: Top SOE share of revenues in China's power sector, 2010).
[561] Annual Financial Report of Aluminum Corporation of China Limited 2011, 37.
[562] "National Development Reform Commission Adjusted and Lowered the Price of Electricity, which will Benefit the Industry of Steel, Cement and Other Metal Industries," *China Business News*, 20 April 2015. http://business.sohu.com/20150420/n411526521.shtml
[563] Michael Wines, "China Fortifies State Businesses to Fuel Growth", *New York Times*, 29 August 2010. http://www.nytimes.com/2010/08/30/world/asia/30china.html

preferential tax rates.[564]

Many subsidies are from local governments given to local SOEs, such as coal and steel companies. Some subsidies are given without explanation. Some subsidies are given with conditions unknown. Government financial support may be misrepresented as revenue or profit of the company in its annual financial report. I found two trends in general. One is that subsidies increased from 2007 to 2014, especially the amount of money granted increased dramatically. Second, subsidies granted to SOEs are usually specifically targeted to the SOE in question, while most subsidies granted to POEs are related to R&D and environmental protection without specific targets. Additional findings by existing research can be observed below, suggesting that systematic financial advantages granted to SOEs exist.

a. More Financial Advantages Granted to SOEs than to POEs

The principal beneficiaries of these policies are SOEs, as well as other favored domestic companies attempting to move up the economic value chain.[565] The amount of subsidies is increasing over the time.[566] The growth of financial advantages granted to SOEs from the government exceeds the growth of profits of these enterprises.[567] For instance, the growth of profits in 2014 compared to the preceding year was 10.13%, while the growth of subsidies during the same period was 13.63%. In 2015, the petrochemical industry received 30% more subsides than 2014, which was associated with subsidies granted to Sinopec.[568] The subsidies granted to SOEs increased from 26 trillion RMB in 2001 to 81 trillion RMB in 2009. [569] (See Table 25 below).

[564] Some subsidies are related to compensatory price control measures.
[565] 2016 Nations Estimate Report, U.S.T.R. p. 92.
[566] "Ranking of SOEs Receiving Subsidies: Each SOE received 50 million RMB and Sinopec ranked as the Top One," *Vision Times*, April 27, 2016. http://m.secretchina.com/node/606307
[567] Shukun Wang, "SOEs Received 60% of all Subsidies from the Government, and PetroChina Ranked as the First One," *New Beijing Magazine*, Oct. 10, 2014, http://news.xinhuanet.com/finance/2014-10/10/c_127079629.htm
[568] *Ibid*.
[569] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 39-63.

Table 25 Subsidies Received by SOEs from 2001 to 2009

(Unit: trillion RMB)

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Subsidies to SOEs	26	21	19	18	17	18	18	96	81

SOEs receive disproportionally more financial advantages than POEs. At the macro level, SOEs are dominant in the industries described above and financial advantages to these industries are mainly enjoyed by SOEs. In most pillar industries, such as the steel industry, no comparable POEs can compete with SOEs. It is mainly the large SOEs who benefit more from the government as opposed to the smaller POEs. For instance, in the first half of 2014, among 2537 publicly traded enterprises (A shares) on stock exchanges in China, 90 % of them received subsidies of 32 trillion RMB in totality. 61.64% of them went to 854 SOEs, which account for 34.16% of the number of enterprises in totality.[570] Central SOEs received subsidies accounting for 31.43%, and local SOEs received subsidies accounting for 30.21%. In 2014, among A shares and B shares on stock exchanges in China, central SOEs received subsidies accounting for 40.78%, local SOEs received subsidies accounting for 26.58%, POEs received subsidies accounting for 23.52% of the total, FOEs and others received subsidies accounting for 9.13%.[571] In totality, SOEs received subsidies accounting for 67.36%, much higher than its proportion in terms of numbers on the exchange in the Shanghai and Shenzhen, on which the number of SOEs accounted for 44.7% of companies listed.[572] China deployed a RMB 4 trillion fiscal stimulus package to counter the economic downturn triggered by the global financial crisis in 2008. Most of these funds and the RMB10 trillion bank loans that supported this fiscal measure, at the end, were allocated to SOEs.[573]

[570] "The most profitable SOEs received financial subsidies from the government and the government is becoming corporatization", *Blog, JieFang News Magazine*, Nov. 22, 2014.
http://blog.people.com.cn/article/1416621257770.html
[571] Shukun Wang, "SOEs Received 60% of all Subsidies from the Government, and PetroChina Ranked as the First One," *New Beijing Magazine*, Oct. 10, 2014, http://news.xinhuanet.com/finance/2014-10/10/c_127079629.htm
[572] This data was estimated at the end of September 2011, 1,047 SOEs were listed on the Stock Exchanges in Shanghai and Shenzhen. WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, p. 35, 58, 61, 63, 72, 73, 114, 121.
[573] Gang Fan and Nicholas C. Hope, "Chapter 16: The Role of State-Owned Enterprises in the Chinese Economy," *China US Focus*, 4. http://www.chinausfocus.com/2022/wp-content/uploads/Part+02-Chapter+16.pdf

Top SOEs received subsidies. The top ten publicly traded enterprises on stock exchanges in China received subsidies accounting for 10% of the total subsidies granted to all enterprises in 2014. PetroChina ranked as the top subsidy recipient, and the Construction Bank ranked as the third. Nearly 50% of the subsidies went to the most profitable SOEs or monopolistic SOEs.[574] In 2014, PetroChina received subsidies accounting for 6.8% of subsidies granted to all enterprises, and Sinopec received subsidies accounting for 4.9% of all subsidies.[575] Given that bankruptcy and privatization of loss-making SOEs is difficult due to social concerns and the fact that no POEs are willing to buy loss-making SOEs, China is still subsidizing its loss-making SOEs implicitly. Loss-making SOEs received subsidies and then covered their losses and became profitable. In the first half of 2014, 422 loss-making publicly traded enterprises in A shares and B shares received subsidies. Among them, 311 enterprises are in the manufacturing industry, 27 enterprises are in the information and software industry, 18 of them are in the agriculture industry, and 12 of them are in the mining industry.[576] Loss-making industries are primarily in the steel, cement, chemical, shipbuilding, automobiles, paper industries and other traditional industries. Some central SOEs became profitable after receiving subsidies. For instance, the profits of China COSCO, an SOE, increased by 0.2 trillion RMB from 2014 to 2015 while subsides granted to it increased by 2.5 trillion RMB.[577]

b. In Various Forms

a) Lower Capital Cost

SOEs tend to benefit from lower cost of capital and better access to capital than POEs.[578] According to statistics from the Hong Kong Institute for Monetary Research in 2009, analyzing the statistics from 280,000 enterprises in China, SOEs could get loans at 2.55% interest rate while the interest rate for POEs was nearly two percent higher. The cost of financing of POEs is nearly

[574] Shukun Wang, "SOEs Received 60% of all Subsidies from the Government, and PetroChina Ranked as the First One," *New Beijing Magazine*, Oct. 10, 2014, http://news.xinhuanet.com/finance/2014-10/10/c_127079629.htm
[575] "Ranking of SOEs Receiving Subsidies: Each SOE received 50 million RMB and Sinopec ranked as the Top One," *Vision Times*, April 27, 2016. http://m.secretchina.com/node/606307
[576] Shukun Wang, "SOEs Received 60% of all Subsidies from the Government, and PetroChina Ranked as the First One," *New Beijing Magazine*, Oct. 10, 2014, http://news.xinhuanet.com/finance/2014-10/10/c_127079629.htm
[577] "Ranking of SOEs Receiving Subsidies: Each SOE received 50 million RMB and Sinopec ranked as the Top One," *Vision Times*, April 27, 2016. http://m.secretchina.com/node/606307
[578] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, p. 35, 58, 61, 63, 72, 73, 114, 121.

two times of the cost of financing SOEs.[579] The difference may vary based on different research and statistics. From 2000 to 2007, it was found that the market interest rate is 2.92 times of that enjoyed by SOEs. [580] Taking into account the corporate size, the cost of financing by large POEs is 6% higher than that of large SOEs, and the difference is 9% for small-and-medium sized POEs and small-and medium sized SOEs. Large POEs can rarely receive interest rates of 10% or lower, while SOEs enjoy interest rates of 5.3% in Zhejiang Province.[581] It is estimated that from 2001 to 2008, 68% of the nominal profits of all SOEs are a result of lower financial costs.[582]

b) Capital and Dividends Locked

First, as for those SOEs that are publicly trade on stock exchanges, China implements a strict policy of non-tradeable shares, i.e., there is a certain percentage of shares held by the state in the SOE that cannot be traded. Second, Chinese SOEs did not turn over any profits to the Chinese Government from 1994 to 2007.[583] After 2008, the majority of SOEs are required to hand over some profits to the state, while some not.[584] In 2009, only 6% of all profits of all SOEs were turned over to the government, and the figure was 2.2% in 2010.[585] The amount of dividend handed over by SOEs to the government increased after 2011.[586] 652 SOEs have been added to the list of SOE that need to turn over dividends to the government while SOEs in the financial services and

[579] Data is from the HongKong Institute for Monetary Research in 2009.
[580] Xiaoxuan Liu and Xiaoyan Zhou, "A Test on the Relationship between Financial Resources and Economy", Journal of Financial Research (2011) (2). [Jinrong Ziyuan Yu Shiti Jingji Zhijian Peizhi Guanxi de Jianyan—Jianlun Jingji JIegou Shiheng de Yuanyin].
[581] He said that he did an survey on the costs of financing of enterprises in Zhejiang Province in China in 2012. *See* the Chairman of the Association of Industrial and Commercial of P.R.C.: SOEs' interest rate is 5.3% while a 10% for POEs can make POEs happy", Goldsen Engtone, (assessed Sept. 14, 2016) http://www.jinxinyintong.com/industry/2013/01/1156.html
[582] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 39-63.
[583] "Opinions on the Budgets of SOEs by the State of Council," [Guowuyuan Guanyu Shixing Guoyou Ziben Jingying Yusuan de Yijian] 2007 (Doc. No. 26). It provides that some SOEs are required to turn over partial of their profit obtained in 2008 to the state.
[584] SOEs not covered by the law regarding SOEs' dividends are SOEs in agriculture, railways, and financial sectors.
[585] World Bank, "SOE Dividends: How Much and to Whom?", World Bank Report (Oct. 17, 2005), 5. http://documents.worldbank.org/curated/en/961421468243568454/pdf/566510WP0SOE1E10Box353729B01PUBLIC1.pdf
[586] Ministry of Finance, "Circular on Improvement to Certain Issues about Operation Budgets of State-Owned Assets," promulgated on 23 December 2010, Doc. No. 2010/392.

telecommunication sectors are not on the list.[587] Currently, about 5-15% of profits of Chinese SOEs are handed over to the state.[588] It is planned to have SOEs give the government 30% of their profits by 2020,[589] which is still relatively low in comparison with the percentage of profits paid by SOEs and POEs in other countries. About 40% of profits of publicly traded enterprises are turned over to their shareholders. About 30-60% of profits of SOEs are turned over to the state in other countries.[590] Moreover, profits turned over by SOEs to governments are mainly given back to these SOEs in various forms, such as capital injection. Only 3.51% of the funds composed of dividends from SOEs are distributed for the welfare of society, while the remaining funds of dividends are given back to SOEs.[591]

c) The Right to Use Land, Resources Fees and Tax Burden

Prior to 2002, the right to use land was given to SOEs nearly without charges while POEs have to pay high fees to the government for the right to use land. Currently, the right to use land is still enjoyed by SOEs with little cost.[592] For instance, according to the annual report 2004 of Sinopec, Sinopec paid rent to its parent SOE, i.e., Sinopec Group, who only paid 5% of the rent as a business tax to the government. Hence, the rent is still retained by the SOE group instead of going to the government. Also, the price of rent paid by Sinopec to its parent SOE is almost 10 times lower than the rent paid by POEs.[593] The subsidiary SOE pays the rent of land to its parent SOE, which

[587] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, p. 35, 58, 61, 63, 72, 73, 114, 121.
[588] From 2002-2008, the dividend rates of 172 Chinese SOEs on the HongKong Stock Exchange was 23.2%. The dividend rates of Chinese SOEs on the U.S. stock exchanges was 35.4% in 2005. World Bank, "SOE Dividends: How Much and to Whom?", World Bank Report (Oct. 17, 2005).
[589] Decision on Certain Major Issues Concerning the Comprehensive Deeping of Reform (15 November 2013). ; Lingling Wei, "China Looks to Consolidate State Companies to Avoid Layoffs," *The Wall Street Journal*, March 12, 2016. http://www.wsj.com/articles/china-looks-to-consolidate-state-companies-to-avoid-layoffs-1457775420
[590] World Bank, "SOE Dividends: How Much and to Whom?", World Bank Report (Oct. 17, 2005), 5.
[591] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 78-83.
[592] Article 3 of "Temporal Regulations regarding the right to use land in the reform of SOEs", [Guoyou Qiye Gaigezhong Huabo Tudi Shiyongquan Guanli Zanxing Guiding], The Ministry of Land and Resources of P.R.C., Feb. 17, 1998. It provides that Parent SOEs can rent or equitize the right to use the land to their subsidiaries.
[593] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 39-63.

treats such payment as its income or profit. This phenomenon is found widely in monopolistic industries in China like coal, gas, oil, mining, cigarette, telecommunication, etc.[594]

The resource tax on oil is merely 1% of sales revenue in China, lower than the average royalty on oil worldwide, which is about 10-20%. The real royalty on gas in China is less than 3% of sales revenue, lower than the average royalty on gas in other countries, namely, 8% and above. The real royalty on coal in China is less than 2% of sales revenue, lower than the average royalty on coal in other countries, which is about 8%-10%. In 2015, the royalty on iron ore was reduced by 40%.[595] Data is lacking with respect to royalties on other resources, such as non-ferrous metals. But on average, royalties in China are lower than the global average royalties.[596] In the telecommunications sector, SOEs in absolute dominance have access to essential facilities and network flows provided by the government without any charge. In contrast, the resources in this regard are commonly allocated through bidding in other countries.[597] From 2007 to 2009, the average tax burden of 992 SOEs on stock exchanges in China was 10%, while it was 24% for POEs.[598] The lesser tax burden on SOEs is largely due to exemptions from taxes or tax refunds.[599]

d) Some Loss-Making or Inefficient SOEs became Competitive due to the Above Advantages Granted to Them

First, financial advantages granted to loss-making SOEs increased in recent years, particularly in the coal and steel industries. In 2015, almost half of important steel companies, most of which are

[594] Qing Ze, "How are subsidies granted to SOEs?" JING55, Nov.20, 2014. http://www.jing55.com/toutiao/20141120/210e8b75dae30d5e72189.html
[595] The Steel Industry in China: the Cost of Exploring Iron Ore and of Using On-grid Electricity Was Reduced, Leading to Large Steel Corporations Benefited," *Yuanta Securities (Hong Kong)*, April 10, 2015. http://finance.qq.com/a/20150410/051918.htm
[596] "Regulations on Compensation Fees for Rare Resources" [Kuangchan Ziyuan Buchang Guanli Guiding], The State Council, 1994; "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 39-63. Qing Ze, "How are subsidies granted to SOEs?" JING55, Nov.20, 2014. http://www.jing55.com/toutiao/20141120/210e8b75dae30d5e72189.html
[597] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 39-63.
[598] The tax reform unified the tax rate as 25% for enterprises after 2008, *see* art. 2, 3, 4. of Tax Law of P.R.C., (approved on March 16, 2007), effective on Jan 1, 2008. http://www.gov.cn/flfg/2007-03/19/content_554243.htm
[599] Qing Ze, "How are subsidies granted to SOEs?" JING55, Nov.20, 2014. http://www.jing55.com/toutiao/20141120/210e8b75dae30d5e72189.html

SOEs, were unprofitable.[600] In the coal industry, all local SOEs are unprofitable. Small-and medium sized POEs have no choice but to shut down while SOEs survived with governmental support.[601] Sixteen publicly-traded coal companies received subsidies about the amount of 2.1 trillion RMB in 2015 which increased by 80% from 2014.[602] Second, SOEs make profits primarily from monopolies or exclusive rights, and the occupation of rare resources with increasing price.[603] The total profits of central SOEs account for 67.5% of the total profits of SOEs. The profits of top ten SOEs comprised 70% of all net profits made by central SOEs in 2009. The profits of central SOEs were mainly made by monopolistic SOEs.[604] For instance, China National Petroleum Corporation and China Mobile Limited made profits exceeding one third of the total profits made by central SOEs. Third, the average return on equity of SOEs was 8.16% from 2001 to 2009, while the comparable figure of POEs was 12.9%, and the average real return on equity of SOEs was -6.29% if various preferential advantages were removed from SOEs.[605] It was also found that efficiency of SOEs was lower than POEs from financial indicators and productivity indicators.[606] Overall, loss-making SOEs survived and inefficient SOEs became profitable due to the above advantages granted to them.

3.2.2 The Nature of Advantages of Monopolies and Exclusive Rights

(1) SOEs Are More Likely to Receive Monopolies or Exclusive Rights

SOEs are more likely to receive monopolies or exclusive rights, such as entry permits, production/exploration licenses, distribution licenses, export rights, import rights, etc. For instance,

[600] Xiaofeng Zhang and Xiaoyu Ren, "Realization of Ten Experiments in SOE Reform, and the Steel and Other Six Industries will Face New Opportunities", *Finance China*, Feb 27, 2016. http://finance.china.com.cn/stock/zqyw/20160227/3603626.shtml

[601] "National Development Reform Commission Adjusted and Lowered the Price of Electricity, which will Benefit the Industry of Steel, Cement and Other Metal Industries," *China Business News*, 20 April 2015. http://business.sohu.com/20150420/n411526521.shtml

[602] "Sixteen Publicly Traded Central SOEs in the Coal Industry Received 2.1 trillion RBM Last Year, and Loss-Making Enterprises Would not Have Survived without Subsidies from the Government," *Sinoergy*, 8 April 2016. http://www.sinoergy.com/bianji1/24123

[603] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 39-63.

[604] *Id*., at 78-83.

[605] *Id*., abstract.

[606] Xiaoxuan Liu, "An Analysis of the Effects of Privatization on China's Industries," Economic Research Journal (Institute of Economics, Chinese Academy of Social Sciences), Issue 8, 2004,

the Anti-Monopoly Law specifically prohibits "administrative monopolies", which means abuses of administrative power to eliminate or restrict competition.[607] However, statutory monopolies (or oligopolies) by SOEs are not classified as administrative monopolies.[608] Hence the law protects the monopolistic SOEs in industries deemed nationally important. [609]

With regard to the entry rights, for instance, although the law does not explicitly provide that only SOEs are permitted in the telecommunication industry, the Chinese Government limits the entry into the industry through MIIT's issuance of specific permits.[610] There are only three enterprises (China Mobile, China Telecom and China Unicom, all of them are SOEs) that are currently authorized to provide mobile services in China, although the law allows POEs entering value-added telecommunication service business.[611]

With respect to exclusive exploration and production rights, for instance, in the oil industry, exclusive rights of exploration and wholesale distribution are only granted to SOEs in fact.[612] The Chinese government almost always allocates rights to natural-resource exploration as no-bid contracts to SOEs. [613] In the rare earths industry, only a limited number of enterprises are licensed to produce, and small-scale enterprises have been ordered to shut down.[614] About 300 companies

[607] Article 8 and Chapter 5 of the Anti-Monopoly Law. SAIC's Provisions on the Suppression of Abuse of Administrative Power to Eliminate and Restrict Competitive Conduct (entered into effect on 1 Feb. 2011, SAIC Decree 2011/55), arts. 3 & 4. NDRC Provisions on Prohibition of Price Monopoly with a focus on price-related violations.
http://www.lawinfochina.com/display.aspx?lib=law&id=0&CGid=96789#menu4
[608] Article 7 of Anti-Monopoly Law 2008; WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, p. 35, 58, 61, 63, 72, 73, 114, 121, para. 253.
[609] The U.S. Trade Representative, "2016 U.S.T.R. National Estimate Report on Foreign Trade Barriers," (2016), 95.
[610] Such as in the areas of local and long distance fixed-line telephone services, and data service providers whose telecommunications services cover two or more provinces.
[611] Annual Financial Report China Mobile Limited, 20-F Form (2014).
http://www.chinamobileltd.com/sc/ir/reports.php
[612] Annual Financial Report of Sinopec, 20-F Form; Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 4.
[613] Usha C.V. Haley and George T. Haley, *Subsidies to Chinese Industry, State Capitalism, Business Strategy, and Trade Policy* (Oxford Uni. Press, 2013), 5.
[614] Considering the cutthroat price competition, the Ministry of Public Security, the General Administration of Customs, and the Ministries of Land Resources (MLR) and Environmental Protection, ordered 126 rare-earth production firms to suspend production and revoked another 161 firms' production licenses in August 2013. "China Focus: China must tackle rare earth industry chaos," *Shanghai Daily*, Aug 9, 2014. http://www.shanghaidaily.com/article/article_xinhua.aspx?id=234479.

had production permits prior to 2012.[615] Due to strict rules on the entry into the rare earths industry, as of 2016, there are only 44 companies that are permitted in the rare earths industry,[616] the majority of which are SOEs. There are extraction quotas and production quotas, both of which were issued sometimes for the benefit of SOEs. Extraction quotas in 2014 increased 10 % in comparison with that of 2013.[617] Part of the reason for the increase is to meet the needs of six giant SOEs after consolidation.[618] Adjustment and modification of production quotas have occurred occasionally for the benefits of SOEs.[619]

With respect to the exclusive rights to export or import, under the planning system prior to 1978, China's trade was conducted under a state trading system with only 12 foreign trade corporations (FTC), which were one type of SOEs at that time.[620] Beginning with the reform in 1979, the number of trading enterprises increased to 200,000, and SOEs accounted for a large share of the

[615] Yue Qi, "Reuters: China is going to give up export duties and export quotas for rare earths," *Wall Street China*, June 4, 2014. http://wallstreetcn.com/node/93218. Ministry of Industry and Information Technology of the People's Republic of China, "Rules on Conditions for Entry Into the Industry of REEs Announced by MIIT," MIIT, Aug 6, 2012.
http://www.miit.gov.cn/n11293472/n11293832/n11293907/n11368223/14767819.html

[616] Ministry of Industry and Information Technology of the People's Republic of China (MIIT), *The Fifth List of Firms That Have Complied with the Regulation on Conditions for Entry into the REEs Industry*, MIIT Doc. No. 2014 (41), June 23, 2014, *available at* http://www.miit.gov.cn/n1146285/n1146352/n3054355/n3057569/n3057572/c3569588/content.html (in Chinese);
MIIT, *The Fourth List of Firms That Have Complied With the Regulation on Conditions for Entry Into the REEs Industry*, MIIT Doc. No. 2013(31), July 4, 2013.
http://www.miit.gov.cn/n1146295/n1652858/n1653100/n3670459/c3680202/content.html (in Chinese);
MIIT, *The Third List of Firms that Have Complied with the Regulation on Conditions for Entry Into the REEs Industry*, MIIT Doc. No. 2012(65), Dec. 26, 2012.
http://www.miit.gov.cn/n1146295/n1652858/n1653100/n3670459/c3680411/content.html (in Chinese);
MIIT, *The Second List of Firms that Have Complied with the Regulation on Conditions for Entry Into the REEs Industry*, MIIT Doc. No. 2012(61), Dec. 11, 2012.
http://www.miit.gov.cn/n1146295/n1652858/n1653100/n3670459/c3680427/content.html (in Chinese);
MIIT, *The First List of Firms that Have Complied with the Regulation on Conditions for Entry Into the REEs Industry*, MIIT Doc. No. 2012(59), Nov. 21, 2012.
http://www.miit.gov.cn/n1146285/n1146352/n3054355/n3057569/n3057579/c3566732/content.html (in Chinese).

[617] "It is still not enough to increase production quotas by 112,00 ton," *Xinhua News*, June 20, 2014. http://news.xinhuanet.com/energy/2014-06/20/c_1111232486.htm.

[618] "Report on the Economic Performance of the Industry of REEs in 2013," MIIT, Feb. 21, 2014. http://www.miit.gov.cn/n11293472/n11293832/n11294132/n12858402/n12858507/15890977.html

[619] For instance, China MinMetals Corp. (SOE) produced rare earths without permits and was forced to suspend production in June 2013. Nevertheless, in September 2013, China MinMetals Corp. said that MIIT agreed to increase the second assignment of production quotas of originally 1435 tons, which was announced in middle of 2013, to 2135 tons. It is unknown why MITT decided to increase the production quota for China MinMetals Corp. The underlying reason might be that production capacity of MinMetals Corp is not fully used. As an SOE, it has negotiation leverage over the government due to its connections to the government. "Subsidiary of China MinMetals has its second assignment of producing REEs increased," STCN, Sep. 11, 2013. http://kuaixun.stcn.com/2013/0911/10749049.shtml

[620] N. Lardy, *Foreign Trade and Economic Reform in China, 1978-1990*, Cambridge University Press, 1991.

trade.[621] In the rare earths industry, with respect to export or import rights, exporting licenses and export quotas were issued to eligible enterprises, most of which are SOEs. Before the consolidation strategy, there were approximately 300 enterprises in the rare earths industry in China. However, only around 30 enterprises, most of which are SOEs, filed applications for exporting REEs each year prior to consolidation.[622]

(2) Anti-Competitive Behavior and Behavior Influenced by Governments After Receiving Monopolies or Exclusive Rights

SOEs' taking advantage of monopolies or exclusive rights in non-reserved markets, such as upstream or downstream sectors, to increase market shares, is an example of anti-competitive behavior after receiving monopolies or exclusive rights. Basically, there are three kinds of markets, i.e., the upstream production market, the middle-stream distribution or transportation market, and the downstream retail market. SOEs take advantage of their monopolies in the upstream production market or the middle-stream market, to expand their market shares in the downstream market, where the competitors in the downstream market are dependent on the monopoly's supply of input. It is in violation of the Anti-Monopoly Law 2008.[623] However, the anti-competitive behavior was not prosecuted.

Taking oil as an example, before 1998, POEs had a large percentage of the downstream retail market for oil in gas stations. However, a governmental document authorized expansion respectively by two giant SOEs (CNPC and Sinopec Group) in 1998 and division of markets into northern and southern markets controlled by them respectively.[624] CNPC and Sinopec Group

[621] Working Party on State Trading Enterprises-State Trading-Updating Notification Pursuant to Article XVII:4(a) of the GATT 1994 and Paragraph 1 of the Understanding on the Interpretation of Article XVII, China, Addendum, G/STR/N/9/CHN/Add.1, 14 July 2003, https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?Query=@Symbol=%20g/str/n/*%20and%20%20@Symbol=%20chn&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#

[622] My calculation was based on data found in the website of the Ministry of the Commerce.

[623] Article 17, 18.2, 18.4 of Anti-Monopoly Law of the People's Republic of China. Adopted at the 29th meeting of the Standing Committee of the Tenth National People's Congress of the People's Republic of China on August 30, 2007, effective as of August 1, 2008.

[624] "Opinions Regarding Regulating Small Refineries and the Distribution of Crude Oil and Processed Oil" (the so-called Doc. No. 38), issued by the State Economic and Trade Commission of the P.R.C. in 1998. This document authorized three SOEs to be vertical monopolies in exploration, refining, import, distribution and resale.

began to acquire privately-owned gas stations in the retail market, with the threat of withdrawing supply of oil to privately-owned gas stations. In that sense, through the "exchange oil for the downstream market", SOEs take advantage of their monopolies in the upstream market for producing oil, to expand their market share in the downstream market for the retail of oil, which is not reserved to them by their monopolies, resulting in many POEs going out of business.

The same strategy occurred in the natural gas market. In the upstream market for producing natural gas, CNPC's production of natural gas accounts for 76% of the total in China. In the middle-stream market for transporting and distributing natural gas, pipelines owned by CNPC account for 80% of the total pipelines in China. In addition, CNPC and Sinopec Group are not in direct competition with each other in the natural gas market. The downstream market for the retail of natural gas in urban areas had a diversity of ownership prior to 2008.[625] For instance, the City Government of Wuwei, through the bidding system, granted a 30-year exclusive project franchise to a POE (Xijiang Guanghui) in 2007 for delivering natural gas to retail end-users in the city and for providing customer services. However, after the commencement of the "West-East Gas Pipeline" in 2008,[626] which is largely operated by CNPC, CNPC began to negotiate with the provincial governments. These agreements, taking one of them between Ganxu Province and CNPC as an example, provide that CNPC will provide natural gas to the province with steady supply on favorable terms, in exchange for receiving exclusive franchises for delivering natural gas to retail end-users in Ganxu Province and for providing customer services. As a result, city governments in Ganxu Province, including Wuwei city, had no choice but to withdraw the exclusive franchise from the POE (Xijiang Guanghui) in 2008, in light of CNPC's monopolistic status in the upstream and middle-stream markets for natural gas. POEs in the downstream market have no choice but to give up business in the cities where pipelines are available, in light of the fact that CNPC is its largest supplier of natural gas to the POE who has business of transporting natural gas by road to

[625] In March 2003, NDRC, the former State Economic and Trade Commission, and the former Foreign Trade Department issued "Catalogue of Industries for Guiding Foreign Investment" [Waishang Touzi Chanye Zhidao Mulu], which opened the urban network of gas and pipe to foreign investment. In May 2004, the Ministry of Construction issued "Measures for the Administration on the Franchise of Municipal Public Utilities" [Shizheng Gongyong Shiye Texu Jingying Guanli Banfa], article 4 authorized municipal governments to franchise in terms of the supply of gas through pipelines in urbans. It changed local monopolies into regional competitors in the market of supplying gas through pipelines.
http://www.lawinfochina.com/display.aspx?lib=law&id=3491&CGid=

[626] It transports imported foreign natural gas as well as natural gas from the Western China to the Eastern China.

those cities not reached by pipelines.[627] Some local SOEs that were granted exclusive franchises in the downstream retail market for natural gas in cities, lobbied their local governments, and cooperated with CNPC in the city to jointly enjoy the market subject to the condition that CNPC is the controller in the retail market of natural gas to end users in the city. Hence, CNPC takes advantages of its monopoly of natural gas production and transmission to expand its market shares in the retail sale of natural gas in urban areas and customer services, through the strategy of "resources in exchange for markets" and negotiations with higher level of governments, resulting in a vertical integrated market for natural gas to the exclusion of POEs who are in the urban market for gas retail sale.[628]

It should be admitted that such anti-competitive behavior could also take place where monopolies and exclusive rights are granted to POEs. However, several differences can be laid out. SOEs are more likely to engage in anticompetitive activities than private, profit-maximizing firms.[629] Anti-competitive behavior of SOEs after receiving monopolies or exclusive rights is more likely to be exempted from domestic competition law either by law or by selective enforcement. With regard to decisions influenced by governments, SOEs are more likely to follow guidelines and instructions of governments.

3.2.3 The Nature of Regulatory and Other Advantages in Favor of SOEs

(1) Mergers and Acquisitions Among SOEs are Assisted by Governments and Exempted From Domestic Competition Laws

Mergers and acquisitions among SOEs are assisted or directed by governments, and are exempted from domestic competition laws. Government mandated mergers and acquisitions are usually implemented at little or no cost. Beginning in 1990s, China adopted a consolidation strategy, which includes vertical and horizontal mergers and acquisitions of SOEs assisted by the government,

[627] "Why Did the Merger of Subsidiaries of CNPC Paused: the Natural Gas Market Refuses Monopolistic Power," *Energy, SINA*, Jan 12, 2016. http://finance.sina.com.cn/chanjing/sdbd/2016-01-12/doc-ifxnkkuy7943686.shtml
[628] Jinbiao Xia and Xiantang Zhang, "CNPC: Being Questioned About its Strategy of Exchanging its Resources for Downstream Markets to the Exclusion of other Enterprises in Downstream Markets," *China Economic Times*, August 1, 2008. http://finance.people.com.cn/GB/67723/7597579.html
[629] David E.M. Sappington and Sidak, J. Gregory, "Competition Law for State-Owned Enterprises," 71(2) *Antitrust Law Journal* (2003): 479, 484.

shutting down small POEs and SOEs through administrative orders, and directing SOEs to buy POEs through administrative orders.[630] The Chinese Government takes measures to limit competition in favor of its SOEs.[631] In the Five-Year plans, one section is about encouraging mergers and restructuring to develop national champions and Chinese brands, with a focus on the auto, steel, cement, machinery, aluminum, rare earth, pharmaceutical, electronic information, shipbuilding, petrochemicals, textiles and light industries. Although SOEs are not mentioned explicitly, they already dominate many of the abovementioned industries.[632]

Horizontal consolidation can be found in the steel industry and coal industry. Beijing has chosen Baosteel, Beijing Shougang, Tangshan Iron and Steel, Anben Steel, and Wugang as a focus for industry consolidation activities.[633] Baosteel, one of the three steelmakers currently owned by the central SASAC, has explored mergers with a number of SOEs owned by sub-national SASACs. In 2009, the government of Hebei province and its SASAC pursued a major consolidation of SOEs in the region, leading to Hebei Iron and Steel becoming of the world's top producers.[634] The remaining enterprises are small and medium sized. Although monopoly is less likely, bloc SOEs are more likely to occur in the steel industry. In the non-ferrous metals industry, China adopted the strategy of consolidating the rare earth industry into six giant groups at the end of 2013, including Baogang Group, China Minmetals, Chinaclo, Guangdong Rare Earth Corp, Ganzhou Rare Earth Group, and Xiamen Tungsten.[635] They are all SOEs, three of which are owned

[630] Fifth Plenary Session of the 14th Communist Party of China, Sept. 28, 1995; Robert E. White, Robert E. Hoskisson, Daphne W. Yiu & Garry D. Bruton, "Employment and Market Innovation in Chinese business Group Affiliated Firms: The Role of Group Control Systems" 4(2) *Management and Organization Review* (2008): 225-56.
[631] Usha C.V. Haley and George T. Haley, *Subsidies to Chinese Industry, State Capitalism, Business Strategy, and Trade Policy* (Oxford Uni. Press, 2013), 5.
[632] "Guiding the merger and reorganization of enterprises", in Part three, chapter nine, section four of 12th Five Year Plan, http://www.gov.cn/2011lh/content_1825838_4.htm in Chinese
http://www.cbichina.org.cn/cbichina/upload/fckeditor/Full%20Translation%20of%20the%2012th%20Five-Year%20Plan.pdf in English; One purpose of consolidation strategy currently is to deal with the overcapacity problem. *See* "Opinions of the State Council Regarding Over Production of the Steel Industry and Poverty Reduction", the State of Council of P.R.C., Feb. 04, 2016, Doc. NO. [2016] 6. [Guowuyuan Guanyu Gangtie Hangye Huajie Guosheng Channeng Shixian Tuokun Fazhan de Yijian] http://www.gov.cn/zhengce/content/2016-02/04/content_5039353.htm ;
[633] George Haley, "Overview of China's pillar and strategic industries," Expert testimony to U.S.-China Economic and Security Review Commission's hearing, "the Extent of the Government's Control of China's Economy, and Its Impact on the United States," May 25, 2007.
[634] "The Closing Deal of Consolidation of three SOEs in the Steel industry", *Price of Steel*, Jan 25, 2010. http://ggjgw.com/new_view.asp?id=8251&ad=16
[635] Xiaoqin Ruan and Feng Qin, "Six rare earths blocs are ready, and MIIT will discuss proposals," *Finance Sina*, Oct. 28, 2014. http://finance.sina.com.cn/stock/s/20141028/071620660117.shtml

controlled by the central government.[636] An oligopoly by the six giant SOEs is inevitable.[637] Each bloc has an exclusive jurisdiction over its region in the domestic Chinese market. Taking Baogang Group as an example, it became in charge of rare earths in the Northern area after the consolidation.[638] SOEs obtain dominant positions in those industries, and their division of markets is assisted and directed by the government.

Some mergers and acquisitions among SOEs violate the Chinese Anti-Trust Law. However, they are not prosecuted. For instance, the mergers among SOEs in the telecommunication sector in 2008 initiated by MIIT, NRRC and the Ministry of Finance, to restructure 6 SOEs into 3 SOEs,[639] didn't get authorization from the Ministry of Commerce, violating Article 21 of the Chinese Anti-Trust Law.[640] The Chinese domestic anti-trust laws or competition laws give exemptions for Chinese SOEs and are not enforced against Chinese SOEs in practice. [641]

(2) Other Regulatory Advantages

As for other regulatory advantages, evidence can also be found from the Anti-Monopoly Law, which make references to industrial policy goals, including strengthening SOEs.[642] The Chinese domestic anti-trust laws or competition laws are not enforced against Chinese SOEs in most cases and the enforcement is selective and limited.[643] The pricing of monopolies may violate Chinese

[636] For instance, Ganzhou Rare Earth Group was established by the city and eight counties in 2004 to exclusively exploit, process and sell REEs in Gangzhou city.
[637] Economic Information, "Geography and market division by six giant REEs group," *People.cn*, Aug 12, 2014. http://politics.people.com.cn/n/2014/0812/c70731-25446075.html
[638] China Security, "Baogang Group and Xiamen Tungsten has got approval from MIIT of consolidation proposal, and the plan will be implemented by the end of the year," *Xinhua Net*, Aug 5, 2014. http://news.xinhuanet.com/fortune/2014-08/05/c_126833588.htm.
[639] The Notification Regarding Further Reform of the Telecommunications System [Guanyu Shenhua Dianxin Tizhi Gaige de Tonggao], issued by MIIT, NDRC, Ministry of Finance of PRC, May 24, 2008.
[640] Article 21 of Anti-Monopoly Law of the People's Republic of China, it provides that most restructuring of central and local SOEs needs authorization from the government.
[641] For more examples, *see* Mark Wu, "The 'China, Inc.' Challenge to Global Trade Governance," *Harvard International Law Journal*, Vol. 57 (May 13, 2016): 55-6.
[642] Anti-Monopoly Law of the People's Republic of China (adopted at the 29th Session of the Standing Committee of the Tenth National People's Congress and effective as of August 1, 2008); Article 1, 4, 7 of the Anti-Monopoly Law 2008. *See* Legislative Affairs Commission, "Interpretation of the Anti-Monopoly of the People's Republic of China," Law Press China (2008) at 4 translated and quoted in U.S. Chamber of Commerce, China's Application of its Anti-Monopoly Law, at 24
[643] Mark Wu, "The 'China, Inc.' Challenge to Global Trade Governance," *Harvard International Law Journal*, Vol. 57 (May 13, 2016): 55-6; The U.S. Trade Representative, "2016 U.S.T.R. National Estimate Report on Foreign Trade

Anti-Trust Law.[644] However, SOEs are not prosecuted. Literature also talks about other kinds of advantages that enjoyed by SOEs, such as investment laws that disadvantage FOEs in favor of SOEs, the enforcement of anti-bribery laws targeting MNCs/FOEs, while Chinese SOEs are not prosecuted by China for bribing foreign officials.[645]

3.3 The Trade Effects of Advantages Granted to Chinese SOEs

China is a large trader and investor. In pursuance of the "going out" policy, which encourages entities to be involved in global markets, imports to China reached their highest level in 2013, 110 times the amount of imports in 1983, and China is one of the top destinations for foreign investment.[646] As for China's exports and outward investment, Chinese firms are now major competitors in advanced country export markets and major foreign investors.[647] There has been a dramatic increase in Chinese outbound investment in recent years.[648] China's export/GDP ratios rose from 8% in 1978 to 26% in 2000 and 21% in 2015, while the U.S. ratios rose from 10% to 11% to 13.4 in 2014.[649] In 2009, China surpassed Germany to become the world's largest

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Barriers," (2016), 95.

[644] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 83-101.

[645] China uses the AML to coerce multinational companies (MNCs) to transfer assets to SOEs. *See* Daniel C.K. Chow and Anna Han, *Doing Business in China: Problems, Cases, and Materials* (West 2012), 168; Daniel Chow, "How China Promotes its State-Owned Enterprises at the Expense of Multinational Companies Doing Business in China and Other Countries," Public Law and Legal Theory Working Paper Series, No. 307, October 5, 2015, North Caroline 41(3) *Journal of Int'l Law* (Spring 2016): 455; "China Media: Xi Jinping's Anti-Corruption Call," BBC News, Nov. 20, 2012. http://www.bbc.com/news/world-asia-china-20405106 ; PRC Criminal Law, art. 164 (Crime of offering bribes to persons other than state officials), (amended in 2011 based on the United Nations Convention Against Bribery), other relevant provisions are art. 163, 385, 387 (crime of offering bribes to state officials); Samuel R. Gintel, Fighting Transnational Bribery: China's Gradual Approach, 31 (1) *Wisc. Int'l L.J.* (2013): 7-9. However, China has never brought a prosecution under the new Criminal Law since its enactment in 2011.

[646] My calculation is based on "China Imports: 1983-2016," *Trading Economics*, http://www.tradingeconomics.com/china/imports ; Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 4.

[647] My calculation is based on "China Exports: 1983-2016," *Trading Economics*, http://www.tradingeconomics.com/china/exports ; The "going-global strategy" (zouchuqu) was proposed in 2000 at the 5th plenary session of the 15th Central Committee. *See* Junyeop Lee, "State Owned Enterprises in China: Reviewing the Evidence," Organization for Economic Cooperation and Development OECD Occasional Paper (2009), 9. www.oecd.org/dataoecd/14/30/42095493.pdf

[648] Nargiza Salidjanova, "Going Out: An Overview of China's Outward Foreign Direct Investment," US- China Economic & Security Review Commission, USCC Staff Research Report (March 30, 2011), 5-6.

[649] My calculation is based on the following sources: "A glimpse of Chinese Economy," Research HKTDC, http://china-trade-research.hktdc.com/business-news/article/ 中國經貿資料 / 中國經貿概況

exporter.[650] In industries such as steel, glass, paper, and auto parts, all of which are capital-intensive industries, and in the space of approximately five years, China rose from a net importer to among the largest producers and exporters in the world.[651] In 2006, China became the largest steel exporter in the world by volume.[652] In 2010, China became the second-largest producer (47%) of steel in the world in 2011. In the years 2002 through 2011, the value of China's exports of autos and auto parts increased and rose from the world's 16th largest to the 5th largest auto and auto parts exporter.[653] The reason for giving an account of China being a large trader is to explain that it is not a price taker, but its behavior (giving advantages to SOEs) can affect international markets (world prices). For instance, welfare in the subsidizing country deteriorates even more when a subsidy is given by a large country to its export-competing industries. Large trading nations, after obtaining economic influence in one country, may threaten to stop making purchases, or to cut off supplies.[654]

Chinese SOEs play a profound role in China' progress toward becoming a large trader. SOEs account for 80% of Chinese FDI.[655] 67.6% of all Chinese outbound direct investment has been funded by Chinese central SOEs in 2009.[656] During the period from 1995-1999, the share of SOEs exports in total exports remained close to 50%.[657] SOEs in services are also expanding to global

/ff/tc/1/1X000000/1X09PHBA.htm ; "Exports of Goods and Services (% of GDP)," World Bank National Accounts Data, and OECD National Accounts Data Files, http://data.worldbank.org/indicator/NE.EXP.GNFS.ZS ; Richard S. Eckaus, "China's Exports, Subsidies to State Owned Enterprises and The WTO," China Economic Review 17 (2006) :1-13.

[650] Steven Mufson, "China Surpasses Germany as World's Top Exporter", *Washington Post*, Jan. 11, 2010. http://www.washingtonpost.com/wp-dyn/content/article/2010/01/10/AR2010011002647.html

[651] Usha C.V. Haley and George T. Haley, *Subsidies to Chinese Industry, State Capitalism, Business Strategy, and Trade Policy* (Oxford Uni. Press, 2013), 2.

[652] Alan H. Brice, Timothy C. Brightbill, Christohper B. Weld, and D. Scott Nance, "Money for Metal: A Detailed Examination of Chinese Government Subsidies to Its Steel Industry," Prepared for the American Iron and Steel Institute (AISI), the Steel Manufacturers Association (SMA), the Committee for Pipe and Tube Imports (CPTI), and the Specialty Steel Industry of North America (SSINA) (July 2007), 1.

[653] Office of the U.S. Trade Representative, "Fact Sheet: WTO Case Challenging Chinese Subsidies," 2012. https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2012/september/wto-case-challenging-chinese-subsidies

[654] They may ask for concessions on economic, political, or military affairs as well. Robert Loring Allen, "State Trading and Economic Warfare," 24 *Law and Contemporary Problems* (Spring 1959): 256-275, 263.

[655] Adrian Wooldridge, "The Visible Hand", *The Economist* (Jan 21, 2012). http://www.economist.com/node/21542931 ; Ministry of the Commerce of P.R.C. (MOFCOM), 2009 Statistical Bulletin of China's Outward Foreign Direct Investment (Beijing: 2010), 12.

[656] Ministry of the Commerce of P.R.C. (MOFCOM), 2009 Statistical Bulletin of China's Outward Foreign Direct Investment (Beijing: 2010), 12.

[657] Richard S. Eckaus, "China's Exports, Subsidies to State Owned Enterprises and The WTO," 17 *China Economic Review* (2006) :1-13.

markets, such as telecommunication services.[658] Some subsidies are used to promote the competitiveness of a selected group of large SOEs. The trade effects of subsidies to profit making SOEs are a major concern to China's trading partners, because these key profit-making SOEs are competitive rivals to large multinational enterprises both in global markets and in the Chinese domestic market.[659] Some loss-making SOEs may manage to revive with the help of subsidies and thereafter can also affect export markets.[660]

It can be found that there are commonalities in all problems in terms of impacts. They either hinder imports, restrain exports, or promote exports, through either increasing or decreasing supply, increasing or decreasing prices, or leading to a difference between domestic prices and world prices. The impacts are different depending on the industry or sector in the context of China. Export promotion is the major effect in the steel, cement, aluminum industries dominated by SOEs.[661] Some literature traces how energy subsidies to Chinese steel have continued to rise along with the industry's exports.[662] Some research has shown a positive relationship between China's exports and subsidies to SOEs.[663] Other literature has tested the relation between subsidies to loss-making SOE and exports.[664] Overall the implication is that subsidies to SOEs have been an important

[658] For instance, CMCC (China Mobile Limited) has its settlement arrangements with respect to international interconnection and roaming with the relevant telecommunications services providers in foreign countries and regions, and collected the relevant usage fees and other fees. *See* "Overviews", the website of China's Mobile Limited, and its annual financial reports.
http://www.chinamobileltd.com/en/about/chairman.php

[659] Hejing Chen and John Whalley, "The State-owned Enterprises Issue in China's Prospective Trade Negotiations," *Centre for International Governance Innovation* (2014); The Behavior of Bureaucrats and State Banks in Allocating Credit to Chinese State-Owned Enterprises, Journal of Development Economics 71 (2003) 533-559, citing FN 1.

[660] Julia Ya Qin, "WTO Regulation of Subsidies to State-Owned Enterprises (SOEs)- A Critical Appraisal of the China Accession Protocol," 7(4) *Journal of International Economic Law*: 863-919.

[661] The U.S. Trade Representative, "2016 U.S.T.R. National Estimate Report on Foreign Trade Barriers," (2016), 86. Also, more and more complaints and questions were raised at the Trade Policy Review of China at the WTO towards SOEs and their advantages in 2016 as compared to 2010. *See* WTO Trade Policy Review: China, Concluding remarks by the Chairperson, 20 and 22 July 2016, https://www.wto.org/english/tratop_e/tpr_e/tp442_crc_e.htm ; WTO Trade Policy Review Body, *Trade Policy Review, Report by the Secretariat, China*, WT/TPR/S/342, 15 June 2016; WTO Trade Policy Review: China, Conlcuding remarks by the Chairperson, 31 May and 2 June 2010, https://www.wto.org/english/tratop_e/tpr_e/tp330_crc_e.htm ; WTO Trade Policy review: China, Concluding remarks by the Chairperson, 19 and 21 April 2006, https://www.wto.org/english/tratop_e/tpr_e/tp262_crc_e.htm

[662] Use the figure 3.1 with specific numbers, Usha C.V. Haley and George T. Haley, *Subsidies to Chinese Industry, State Capitalism, Business Strategy, and Trade Policy* (Oxford Uni. Press, 2013), 57.

[663] Sourafel Girma, Yundan Gong, Holger Gorg, and Zhihong Yu., "Can Production Subsidies Foster Export Activity? Evidence from Chinese firm-level data," Working Paper Series No. 6052, Centre for Economic Policy Research, (London: Jan. 2007).

[664] It explores the relation of loss-making SOE subsidies to SOE exports to estimate regressions on exports of SOEs using data from a set of thirty Chinese provinces. Citing FN 6 from Richard S. Eckaus, "China's Exports, Subsidies to State Owned Enterprises and The WTO," 17 *China Economic Review* (2006) :1-13.

influence in generating SOEs' exports.[665] For instance, the Chinese Government's financial support in steel and aluminum industries have contributed to massive excess capacity in China, with the result of over-production distorting global markets. China's aluminum excess capacity contributes to a decline in global aluminum prices.[666]

Export restraints are the major effects in natural resources sectors, such as non-ferrous metals. Take one more example, the strategy of shutting down POEs and expanding power of SOEs, giving several giant SOEs control of exploration, production, and distribution, can lead to SOEs being in control of natural resources, affecting exports in that SOEs may form a bloc to restrain exports.[667] The impact of impeding imports of goods or services or foreign investment is primarily seen in the sectors of petroleum, telecommunication, civil aviation, shipping and shipbuilding, auto vehicles, etc., dominated by SOEs with monopolies or exclusive rights, which may constitute barriers to trade.[668] For instance, the share of imported vehicles accounts for 5% of Chinese market in terms of numbers of cars sold in 2014.[669] Taking the civil aviation industry (manufacture of commercial aircraft) as an another example, of the 120 central SOEs listed on SASAC's website, three of the top five listed companies are involved in the aerospace or aviation industry, and there are seven

[665] Richard S. Eckaus, "China's Exports, Subsidies to State Owned Enterprises and The WTO," China Economic Review 17 (2006) :1-13.
[666] The U.S. Trade Representative, "2016 U.S.T.R. National Estimate Report on Foreign Trade Barriers," (2016), 86.
[667] Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 4.
[668] For instance, trade barriers can be done through mark-up, custom specification, etc. Mark-up means the ratio between the cost and selling prices. In the context of import monopolies, mark-up prices mean the selling prices to domestic markets after importing the goods. Custom specification means an official document stating details and rules for importing or exporting goods into or from a country. *See* Dictionary Cambridge, http://dictionary.cambridge.org/dictionary/english/customs-specification (last visited June 28, 2017.); One example can be found between Japan and Australia concerning importing STEs of wheat, barley and sugar from Australia to Japan. *See* WTO Working Party on State Trading Enterprises, Questions Posed by Australia Concerning the New and Full Article XVII Notification of Japan, State Trading, G/STR/Q1/JPN/6, 9 Oct. 2007; WTO Working Party on State Trading Enterprises, Questions Posed by Australia Concerning the New and Full Article XVII Notification of Japan, State Trading, G/STR/Q1/JPN/7, 7 Oct. 2009; WTO Working Party on State Trading Enterprises, Questions Posed by Australia Concerning the New and Full Article XVII Notification of Japan, State Trading, G/STR/Q1/JPN/9, 20 Oct. 2009.
[669] 1.4 million vehicles were imported to China in 2014, while 23.7 million vehicles were sold in China in 2014. *See* China-Britain Business Council, "Report: The Automotive Market in China," 2015 EU SME Centre, (2015), 5, 8. http://www.ccilc.pt/sites/default/files/eu_sme_centre_sector_report_-_the_automotive_market_in_china_update_-_may_2015.pdf ; China Association of Automobile Manufacturers, A summary on the automobile market in 2014 and an estimate on the automobile market in 2015, http://www.caam.org.cn/xiehuidongtai/20150112/1805144356.html.

SOEs in the aviation or aerospace industry in total on the list.[670] China currently accounts for 22 percent of Airbus' 2010 orders and 15 percent of Boeing's orders, and COMAC (an SOE) is in competition with Boeing and Airbus.[671] In March 2008, the China Commercial Aircraft Company (COMAC) was formed to design and build large passenger aircraft of over 150 passengers to reduce China's imports of Boeing and Airbus.[672]

In a nutshell, given that China is a larger trader and investor and Chinese SOEs play a profound role in China in terms of trade and investment, grants of various advantages to Chinese SOEs generate negative international effects. These effects can be observed as promoting exports of steel, aluminum, cement, etc., restraining exports of natural resources, and impeding imports of, for instance, petroleum and services, to China.

3.4 Little Incentive in Domestic China to Deal with the Problems

Little incentive can be found domestically in China to deal with the problems of SOEs receiving advantages from the analysis of political economy theory, from the Chinese Communist Party's (CCP) perspective, and from the historical and ideological perspectives.

3.4.1 Political Economy Theory Does Not Work Well in China

If political economy theory works, incentives can be found from domestic interest groups to oppose the grants of advantages. However, political economy theory doesn't work so well in the context of China, and hence there is little domestic incentive to deal with the problems. Nevertheless, political economy theory can be used to explain partially why there is little domestic

[670] *See* a list of central SOEs on the website of the State-owned Assets Supervision and Administration Commission of the State Council, http://www.sasac.gov.cn/n1180/n1226/n2425/index.html

[671] For instance, COMAC's jet in the next plan is the C919, a narrow-body jet that China hopes will be able to compete directly the Airbus 320 and the Boeing 737. "G.E. to Share Technology with China in New Joint Venture," *New York Times*, Jan. 17, 2011.
http://www.nytimes.com/2011/01/18/business/global/18plane.html?_r=0 . "Ryan Air May Spend Billions on Cheap Chinese Jets," *Independent.ie.* Feb. 6, 2011.

[672] *See* the website of the corporate, Company Profile, Commercial Aircraft Corporation of China, Ltd.
http://english.comac.cc/aboutus/introduction/
https://en.wikipedia.org/wiki/Comac

incentive to deal with the problems, given that economic reform, particularly SOE reform in China, is intertwined with political factors.[673] The model of the classic political economy theory based on the U.S. politics, has two players, i.e., politicians and voters (voters can be categorized into different interest groups, such as corporations and individuals). On the contrary, in the context of China, there are three major players, i.e., the Chinese Communist Party, the state/government, and SOEs. The concept of voters is insignificant in China.

(1) SOEs Have Strong Lobbying Power to Ask for Advantages Without Opposition from Counterparties

SOEs ask for advantages that will benefit their economic interests. Grants of monopolies and financial advantages can guarantee SOEs' profits.[674] SOEs oppose the reforms on a diversity ownership or any reduction of advantages.[675] For instance, the largest SOEs in the oil industry strongly oppose market reform in natural gas which can increase production.[676] Beneficiaries, such as SOEs themselves, directors and managers of SOEs, can get benefits through SOEs receiving various advantages, equivalent to the outcome resulting from improving the productivity or efficiency of SOEs in the end. For instance, monopolistic status guarantees SOEs large profits, and hence, directors and mangers of SOEs can get benefits indirectly. Since beneficiaries in the end enjoy the same benefits, they wouldn't care about the means of getting the end either through improving the efficiency of SOEs or through SOEs receiving advantages. Furthermore, incentives and motives of managers of SOEs will more likely cause them to ask for advantages. For instance, given that expanding the scale of operations rather than profit-maximization is the goal of SOEs, the managers are promoted based on the scale of the operation in most cases. Hence, given that

[673] Dali L. Yang, *Remarking the Chinese Leviathan: Market Transition and the Politics of Governance in China* (Stanford University Press, 2004); *See* Barry Naughton, *Growing Out of the Plan: Chinese Economic Reform, 1978-1993* (Cambridge University Press, 1996), 1-25 and 309-26.

[674] The need for maintaining monopolistic profit also accounts for governmental price control. Government may also set high floor prices for SOEs so that they can get profit.

[675] *See* Xuejin Zuo and Hangsheng Cheng, *State-owned Enterprise Governance in China: An International Comparative Perspective* (China: Social Science Academic Press, 2006), 15-33. China Examiner, "SOE Reform Encountered Difficulties and Obstacles: Xi Jinping Cannot Tolerate with it and Li Keqiang Was Angry," 29 May 2016.

[676] Jinbiao Xia and Xiantang Zhang, "CNPC: Being Questioned About its Strategy of Exchanging its Resources for Downstream Markets to the Exclusion of Other Enterprises in Downstream Markets," *China Economic Times*, Aug. 1, 2008. http://finance.people.com.cn/GB/67723/7597579.html

receiving more advantages can help SOEs expand the scale of operations, it creates incentives for managers to advocate for more grants of advantages from the government.

Chinese SOEs have stronger lobbying power and have no comparable counterparties that can leverage against them. On the one hand, first, SOEs are well-organized and well-financed interest groups.[677] Second, SOE managers are powerful. For instance, the hierarchical ranks in CNPC and Sinopec group are equivalent to those of governmental departments. The managers of CNPC and Sinopec have higher profiles than the officials in the bureau that supervises them.[678] On the other hand, consumers or taxpayers in China have little voice in the political arena. POEs in China are less likely to have a significant influence on political officials. There are no competing interest groups of POEs that can counter the influence of SOEs. The power of trade unions in China is not comparable to those in western countries. It is contrary to political economy theory which models that taxpayers are voters in the U.S., influencing the political agenda, and the balance coming from the competing interest groups.[679]

(1) Potential Conflicts of Interest can be Handled by the CCP

There are potential conflicts of interest among different interest groups,[680] which may have a by-product consequence of reducing advantages granted to SOEs. First, there are conflicts of interest between SOEs and governmental budgets. There are budgetary constraints for giving advantages. Given that the efficiency of SOEs is lower than that of POEs, doubts are cast to the efficiency of granting advantages to SOEs, and hence the efficiency of governmental expenditure.[681] Second, there are conflicts of interest among different SOEs, such as the competition among giant SOEs in the same industry,[682] and the competing interests among import-competing SOEs, SOEs who need

[677] Paul Krugman, "Is Free Trade Passe?" 1 Economic Perspective (1987): 131-144, 142.
[678] Usha C.V. Haley and George T. Haley, *Subsidies to Chinese Industry, State Capitalism, Business Strategy, and Trade Policy* (Oxford Uni. Press, 2013), 37.
[679] The balance can come from, for instance, industries which use intermediate products as inputs, who can exercise countervailing power and block the protection of domestic intermediate products, *see* Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 277.
[680] These are essentially zero-sum games in that one group receive advantages at the expense of another group.
[681] Ling Liao and Liulong Cao, "The Reform on the Supply Side: the Steel industry turns left and the coal industry turns right," notes from the first day of survey done by the GF Securities regarding the reform on the supply side facing the reform of SOEs, *GF Securities Research*, 23 July 2016. http://www.weidu8.net/wx/146138
[682] The anti-trust dispute between China Unicom and China Mobile shows that there is interest conflict among SOEs.

imported goods as inputs, and exporting SOEs.[683] Third, there are conflicts of interest between the central government and local governments. SOE reform is related to fiscal and taxation systems, which significantly affect the relationship between the central government and local governments. The central government wants to have stronger power over local governments, and hence, may require local governments to reduce grants of advantages to SOEs through taking back local governments' power to grant advantages to SOEs, whose revenues largely contribute to local governments' budgets.[684] Fourth, there are political struggles among political factions. For instance, at the end of 1970s, the political struggles between the reform faction within the CCP and their conservative rivals, resulted in an economic reform, which was the most political effective way for the reform faction to gain political power. Hence, the reform faction embraced non-state enterprises and relaxed some monopolies of state enterprises to have economic growth. The CCP is divided between the ruling faction in power and the opponents, i.e., the non-ruling faction not in power, which may have connections with high profile managers and directors of SOEs. Hence, the reform of SOEs is one tool for the ruling faction to weaken the power of opponents through, for example, a diversity of ownership, changing managers and directors of SOEs, anti-corruption, etc. However, it should not be expected that the extent of reducing advantages granted to SOEs in SOE reform will be intense, given that political fights essentially switch power from one faction to the other within the CCP.[685]

However, the abovementioned conflicts of interest are not strong given that there is shared common interest among those groups and the CCP is capable of managing these conflicts of interest through the rotation of personnel and directives. In China, the three major players, i.e.,

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In the fall of 2011, reports indicated the National Development and Reform Commission was investigating anti-competitive behavior by two major telecom SOEs, China Unicom and China Mobile allegedly charging prices for access to their broadband backbone networks that were higher for competitors than for internet operators. *See* Andrew Szamosszegi and Cole Kyle, "An Analysis of State-owned Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission (October 26, 2011), 4; Elizabeth J. Drake, "Chinese State-Owned and State-Controlled Enterprises: Policy Options for Addressing Chinese State-Owned Enterprises," Testimony before the U.S. – China Economic and Security Review Commission (Partner, Law Offices of Stewart and Stewart, 15 Feb. 2012), 8.

[683] Joost Pauwelyn, "New Trade Politics After the Doha Round," *Les Conférences de HEI avec le parrainage du quotidien Le Temps*, Geneva, 5 December 2007.

[684] WTO Trade Policy Review Body, *Trade Policy Review, China*: Record of the Meeting, WT/TPR/M/264, July 17, 2012, para. 126.

[685] For instance, high profile managers or CEOs in PetroChina, Sinopec, CNOOC, China Mobile, Telecom, China Unicom have stepped down after Xi Jinping took power. *See* China Examiner, "SOE Reform Encountered Difficulties and Obstacles: Xi Jinping Cannot Tolerate With it and Li Keqiang Was Angry," 29 May 2016.

SOEs, the government, and the CCP share the common interest in a network given that the incentives of the directors and managers of SOEs and the government officials are associated with the CCP. It is contrary to the incentives of the politicians in political economy theory based on the U.S. electoral model, which are associated with the voters (campaign contributors). For instance, if there is a battle between import-competing SOEs on one hand (they advocate for domestic subsidies for SOEs and restraint of imports), and SOEs who are consumers of imported goods and SOEs who export on the other hand (since these SOEs will advocate for reducing import restraints and export subsidies), SOEs usually do the cost-benefit analysis in terms of how much tariffs should be imposed on imported goods, and the CCP may address it by Party directives through the government, by directing the import-competing SOEs to sell the product domestically to other downstream SOEs at prices lower than imported goods. Furthermore, the CCP tries to eliminate conflicts of interest through a rotation system of personnel among SOEs and government officials by the CCP's appointment power.[686] For instance, there might be a conflict of interest between SOEs asking for financial advantages, and the governmental budgetary department that wants to restrain grants of financial advantages to SOEs. Keeping in mind the roster personnel, officials in the budgetary department and SOE managers may agree on an exchange of current interests for future interests. An official (A) might be rostered to be an SOE manager in the future, and an SOE manager (B) might be rostered to be an official in the future. Thus, A and B agree explicitly or implicitly that A will agree to give financial advantages to the SOE in which B is a manger now. In exchange, in case that A becomes the SOE manager and B becomes the official in the future, B will be willing to give financial advantages to the SOE in which A becomes a manager in the future.

In summary, political economy theory, which is based on the U.S. politics, doesn't work well in China in that SOEs have strong lobbying power to ask for advantages without opposition from counterparties. POEs, trade unions, taxpayers and consumers in China have less lobbying power than SOEs, which have better connections with the government and the CCP. Furthermore, potential conflicts of interest, such as the conflict of interest between SOEs and governmental

[686] Dali L. Yang, *Remarking the Chinese Leviathan: Market Transition and the Politics of Governance in China* (Stanford University Press, 2004), 5. The roster can be evidenced by one survey of the resumes of officials in ministries and commissions in the State Council, it shows that 56 out of 183 officials have working experiences in SOEs, accounting for 30.6%. A survey of resumes of senior executives of 123 central SOEs shows that 115 senior managers of 47 SOEs have the background of working in governmental offices. *See* "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), Abstract.

budgets, the conflict of interest among different SOEs, and the conflict of interest between central and local governments, and conflict of interest among political factions can be well handled by the CCP through rotation of personnel and directives.

3.4.2 Little Incentive from the Chinese Communist Party

The need for political legitimacy and the fact that the Party controls the state explains ultimately the reason for giving advantages to SOEs.[687] The essential reason for the CCP to initiate an economic reform was the desire for legitimacy as the controlling party since improving lives of the people is the best way to preserve the CCP's power.[688] Giving various advantages to SOEs can ensure SOEs' dominance in strategic and other important sectors, which allows the Party to control the economy through SOEs.[689] The Party wants to control the state, which is primarily achieved by controlling the economy through SOEs with two parallel management structures.[690] The primary objective of the CCP in the past years is to maintain stability, which is guaranteed by maintaining employment, even in face of decreased GDP. This is because the continuous dominance of the CCP is dependent on stability. The status quo is more likely to be maintained as long as stability is not threatened. SOE reform is limited by its objective of sustaining social stability. Such limitation is taken advantage of by SOEs, which bet that SOE reform won't be thorough. As long as the CCP feels that subsidies to SOEs are necessary in order to maintain employment levels, SOEs have incentives to lobby for subsidies.[691]

To that end, it is not likely that the CCP will reduce influence over SOEs, or reduce substantively various advantages to SOEs, despite current challenges, such as slowed economic growth in China

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[687] Daniel Chow, "How China Promotes its State-Owned Enterprises at the Expense of Multinational Companies Doing Business in China and Other Countries," Public Law and Legal Theory Working Paper Series, No. 307, October 5, 2015, 41(3) *North Caroline Journal of Int'l Law* (Spring 2016): 455.

[688] SOE reforms were deemed to be necessary in order to increase economic growth and raise living standards. *See* Xi Li, Xuewen Liu and Yong Wang, "A Model of China's State Capitalism," HKUST IEMS Working Paper N. 2015-12 (Feb. 2015), 9. http://iems.ust.hk/wp-content/uploads/2015/02/IEMSWP2015-12.pdf

[689] Daniel Chow, *The Legal System of the People's Republic of China in a Nutshell*, 3rd edition (West Academic Publishing, 2015), 21.

[690] One structure is the corporate management structure, and the other is the Party structure. Persons who hold positions in the corporate management structure simultaneously hold positions in the Party structure of approximately equal rank. *See* Liwen Li and Curtis Milhaupt, "We are the (National) Champions: Understanding the Mechanisms of State Capitalism in China," 65 *Stan. L. Rev.* 697 (2013): 737.

[691] WTO Trade Policy Review Body, *Trade Policy Review, China*: *Record of the Meeting*, WT/TPR/M/264, July 17, 2012, para. 61.

in recent years;[692] overcapacity in steel and metal industries caused by financial advantages granted to SOEs; insufficiency of increasing wages of workers to deal with inflation partially caused by large investments by SOEs and subsidies granted to SOEs;[693] the increasing prices of real estate, which can be partially attributed to the fact that many financial advantages granted to SOEs are channeled into the financial sector or the real estate sector instead of being used to improve productivity.[694] Those challenges are not strong nor urgent enough to make the CCP implement thorough SOE reform that will put the stability into risk.

Although some reform efforts have been made regarding SOEs, [695] eliminating various advantages granted to SOEs and regulating their behavior afterwards are not likely to occur in China. China has indicated that future foreign trade development will transfer from scale expansion to quality and profits promotion.[696] In that sense, there is less pressure on SOEs to expand scale, and hence less SOEs' lobbying for advantages. But the whole dynamic of the motives of managers of SOEs doesn't change. In light of the development of a social security system nowadays, there is less need for maintaining SOEs solely out of the employment concern, and hence it is more likely that loss-making SOEs will go bankrupt. China has reduced non-tradeable shares of SOEs publicly

[692] It is evidenced by the fact that both exports and imports are declining, shown from the data about trade balancing during the period of 2010-2015. *See* "China Balance of Trade, 1983-2016, Data/Chart/Calendar/Forecast," *Trading Economics*, http://www.tradingeconomics.com/china/balance-of-trade
National Bureau of Statistics of China, *China Statistical Yearbook 2015*, (2015).
http://www.stats.gov.cn/tjsj/ndsj/2015/indexeh.htm; "Fresh Data Confirms Chinese Economic Slowdown," *BBC News Business*, 1 March 2016. http://www.bbc.com/news/business-35693794

[693] For more about the historical reform of Chinese SOEs and grant of various advantages to SOEs, *see* Barry Naughton, *Growing Out of the Plan: Chinese Economic Reform, 1978-1993* (Cambridge University Press, 1996); Jiagui Chen, Research on the 30 Years of China's Stat-owned Enterprise Reform, eds. Zheng LV and Sujian Huang (China: Economy & Management Publishing House, 2008); Xuejin Zuo and Hangsheng Cheng, *State-owned Enterprise Governance in China: An International Comparative Perspective* (China: Social Science Academic Press, 2006).

[694] As for some SOEs that are publicly-traded on stock exchanges, the profit from non-main operation has exceeded the profit from main operation. *See* "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 101-111.

[695] SASAC, NDRC and the Ministry of Human Resources and Social Security announced "Ten experiments for SOE reform" on Feb. 25, 2016, including the power of the board of directors, salaries, state assets operation companies, mergers and restructuring of central SOEs, ownership reform in some key industries, shares held by workers, information transparency of SOEs, separating social obligation of SOEs for their workers and easing historical burden. "Report of the Development of the Steel Industry 2016", Association of the China Steel Industry, May 25, 2016, http://www.chinamission.be/chn/zgggfz/zghgjj/t1366468.htm; Ye Yang, "SASAC announced the timeline for the Reform on the Supply Side, and the production of Coal SOEs are to be reduced," *Xinhua Net*, July 22, 2016. http://news.xinhuanet.com/fortune/2016-07/22/c_129168257.htm

[696] "China's Foreign Trade Flourishes," *China Daily*, 08 Dec. 2011, p. 8. http://usa.chinadaily.com.cn/opinion/2011-12/08/content_14230448.htm

listed on stock exchanges.[697] From 2002-2009, there was reform of some monopolistic industries like oil, gas, airline, electricity generation and distribution, telecommunications and railways. However, they were only minor reforms.[698] Regulation of behavior of SOEs with monopolies or exclusive rights didn't work out very well since "administrative capture" may occur particularly where local governments are captured by SOEs.[699] The SASACs system cannot increase independence of SOEs' decision making substantively given that the interference from other governmental agencies is not eliminated absolutely, and that the double roles of SASACs, as both the owner and the regulator of SOEs, create problems, and that the CCP has its members in SASACs.[700]

In a nutshell, there is little incentive from the CCP the deal with the problems of SOEs receiving various advantages, given that the SOE reform may threaten stability, which is the CCP's primary objective and essential factor in preserving control over the state. Although there are some challenges in the economic development caused by giving advantages to SOEs, and some reform efforts directed at SOEs have been made, these challenges are not urgent enough to compel the CCP to undergo thorough SOE reform regarding withdrawing various advantages to SOEs.

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[697] In May 2010, China's State Council issued Certain Opinions on Encouraging and Guiding the Sound Development of Private Investment towards sectors that have been dominated by SOEs. The policies set out in the Opinions are not applied to foreign investment. *See* WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, summary, para. 14.

[698] For instance, in May 2013, China introduced a pilot program to allow non-SOEs to do the business of the resale of mobile services to customers through entering leasing contracts with China Unicom, China Telecom or China Mobile. However, this pilot program ended in 2015 *See* Annual Financial Report of China Mobile Limited, 2014 20-F Form, (2014). http://www.chinamobileltd.com/sc/ir/reports.php ; Foreign firms are excluded from the pilot program. *See* The U.S. Trade Representative, "2016 U.S.T.R. National Estimate Report on Foreign Trade Barriers," (2016), 91; WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China*, WT/TPR/S/264, May 8 2012, summary.

[699] For example, China attempted to supervise the electricity monopoly by establishing an independent agency in 2012. This effort, however, failed due to "administrative capture" by the electricity industry. To take an another example, local governments may lower the standard of regulations on giant SOEs in the oil industry regarding their transportation and retail out of fear the giant SOEs in the oil industry may threaten to withdraw or reduce the supply of oil to that city. *See* Jinbiao Xia and Xiantang Zhang, "CNPC: Being Questioned About its Strategy of Exchanging its Resources for Downstream Markets to the Exclusion of Other Enterprises in Downstream Markets," *China Economic Times*, August 1, 2008. http://finance.people.com.cn/GB/67723/7597579.html

[700] "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 17-34; Michael M. Du (Ming Du), "China's State Capitalism and World Trade Law" 63 (2) International and Comparative Law Quarterly, 409-448 (Jan. 11, 2014): 417-419; Law of the People's Republic of China on the State-Owned Assets of Enterprises (Adopted at the 5th session of the Standing Committee of the 11th National People's Congress on October 28, 2008), arts. 11-15. http://www.lawinfochina.com/display.aspx?lib=law&id=7195&CGid=

3.4.3 The Historical and Ideological Factors

The examination of the historical factor is relevant from the viewpoint of path dependence.[701] Also, one theory suggests that trade policies are biased in favor of maintaining the status quo. It is more likely for an industry to be protected now if it was protected in the past. Governments also seem reluctant to adopt trade policies that result in large changes in the distribution of income, regardless of who gains and who loses. [702] Most SOEs have already gotten advantages from governments, and it is likely that such advantages will remain without major changes in the future. The origins of giving subsidies for inputs or raw materials, subsidies for fixed assets, subsidies to loss-making SOEs, better access to capital, etc., can be found by tracing back to the history of China after 1979.[703] However, the path dependence justification for granting advantages to SOEs cannot be sustained given that, first, it has been a long period of time since the 1979 economic reform, and hence departure from the path is available; and second, circumstances have changed a lot as opposed to 1990s or decades ago, given that Chinese SOEs are more active in global markets.

Ideological obstacles can be found in that the communist political ideology and its perception that state should play the dominant role in economy and state ownership should remain intact continues. To that end, giving various advantages to SOEs is an effective way to preserve the ideology of state capitalism. In the reform of SOEs regarding state ownership, the state grip is tight though.[704]

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[701] From a path dependence viewpoint, historical process and institutional conditions matter to some degree. For the basic concept of path dependence, *see* S. J. Liebowitz, "Path Dependence, Locke-In, and History," https://www.utdallas.edu/~liebowit/paths.html

[702] Dominick Salvatore, *International Economics*, 5th edition (Englewood Cliffs, N.J.: Prentice-Hall, 1995), 277.

[703] For more about the historical reform of Chinese SOEs and grant of various advantages to SOEs, *see* Barry Naughton, *Growing Out of the Plan: Chinese Economic Reform, 1978-1993* (Cambridge University Press, 1996); Jiagui Chen, *Research on the 30 Years of China's Stat-owned Enterprise Reform, eds. Zheng LV and Sujian Huang* (China: Economy & Management Publishing House, 2008), 319; Xuejin Zuo and Hangsheng Cheng, *State-owned Enterprise Governance in China: An International Comparative Perspective* (China: Social Science Academic Press, 2006).

[704] For instance, the SASAC of Shangxi Province requires that the percentage of state shares shall be more than 50% in publicly traded SOEs in the energy sector. It is the same with the steel industry where the cooperation between SOEs and POEs regarding mixed ownership is not encouraged by the government. *See* Ling Liao and Liulong Cao, "The Reform on the Supply Side: the Steel industry turns left and the coal industry turns right," notes from the first day of survey done by the GF Securities regarding the reform on the supply side facing the reform of SOEs, GF Securities Research, 23 July 2016. http://www.weidu8.net/wx/146138

3.4.4 Summary of 3.4

There is little incentive in China to deal with the problems of SOEs receiving various advantages. This is because the relationship among SOEs, POEs, governments, taxpayers, consumers, etc., are quite different from western countries, such as the U.S., which is the basic model of political economy theory. In political economy theory, different interest groups have respective lobbying power for their own interest, and encounter opposition from other interest groups, and hence there is a balance and check. However, Chinese SOEs have strong lobbying power and little opposition from other interest groups. The potential conflict of interest among different interest groups in China can be better handled by the CCP through personnel rotation and directives. The CCP has control over the state through control over the economy, which is primarily through the tool of SOEs. Reform on SOEs regarding reducing or withdrawing advantages given to SOEs may threaten the social stability, which may consequently threaten the control status of the CCP. To that end, the CCP has little incentive to deal with the problems of SOEs receiving advantages. The status quo is more likely to be maintained, and the communist political ideology is likely to prevent the CCP from any further attempts to make thorough SOE reform.

3.5 Conclusion of Chapter 3

This Chapter examines the problem of SOEs in the context of China, and finds that SOEs are widely present in China generally. By examining the extent to which Chinese SOEs receive various advantages from the Chinese Government in ten industries, it finds that SOEs receive more financial advantages in various forms with less transparency than POEs; SOEs are more likely to receive monopolies and exclusive rights, and are more likely to engage in anti-competitive behavior and their decision making is more likely to be influenced by governments; SOEs are more likely to receive regulatory advantages, such as mergers and acquisitions that are assisted by governments, exemption from domestic competition laws, and other laws. Given that China is a large trader and investor, and Chinese SOEs play a significant role in international trade, there are negative trade effects caused by giving advantages to Chinese SOEs, such as impeding imports, promoting exports, restricting exports and impeding foreign investment in China. This has caused concern at the international level regarding the grants of advantages and the behavior of SOEs. The problems need international disciplines given that there is little incentive for China to deal

with the problems. That is because political economy theory doesn't work well in China in that Chinese SOEs have stronger lobbying power and have no comparable counterparties raising opposition. The potential conflicts of interest can be handled by the CCP, which has little incentive to deal with the problems since the CCP's primary objective is to maintain stability.

After examining the problems in the context of China, the next chapter will look at current WTO rules to figure out whether they are adequate or not to solve the problems of SOEs receiving advantages in China.

Chapter 4: The Existing WTO Rules Addressing the Problems and Their Weaknesses

This Chapter will examine the current WTO rules that are relevant to address the various advantages granted to SOEs and the special WTO rules that are applicable to China and its SOEs. In general, these rules fail to regulate adequately advantages granted to SOEs.[705] In Section one, I examine the rules that discipline financial advantages granted to SOEs in the areas of trade in goods, trade in services, and trade-related investment. Then I examine the rules that discipline monopolies and exclusive rights granted to SOEs in the above three areas, as well as rules that discipline regulatory advantages granted to SOEs in the three areas. Last, I examine the special rules agreed to by China in its accession to the WTO with respect to advantages granted to SOEs. Finally, the purposes of the rules will be explored in order to illustrate the limitations of these rules.

In Section two, I explain how the current WTO rules cannot cover some issues related to SOEs, and how the current rules are deficient even if they could be interpreted more broadly than at present so as to address issues related to SOEs receiving advantages. First, I analyze four aspects in respect of financial advantages enjoyed by SOEs: (i) the problems of SOEs giving financial advantages to other SOEs; (ii) the problem of upstream subsidies in the context of Chinese SOEs; (iii) the problem of privatization in the context of Chinese SOEs; and (iv) the problem of finding "specificity" and "benchmark" in the context of Chinese SOEs. These aspects will be examined with possible approaches to address them within the WTO rules. Assessments of the inadequacy of each approach will be given.

Second, I examine monopolies or exclusive rights granted to SOEs. I look at the problem from two aspects, one is the grant of monopolies or exclusive rights per se, and the other is the behavior of SOEs that have been granted monopolies or exclusive rights. I examine the WTO rules to consider whether they are adequate to address these two aspects. Third, I examine the regulatory advantages granted to SOEs. On the one hand, the exemption from domestic competition laws and other regulatory advantages will be examined. On the other hand, the behavior of SOEs after receiving

[705] An historical account of rules to address this problem has been given in Chapter One.

regulatory advantages will be analyzed. In addition, I consider the issue of whether there are justifications to excuse the behavior of SOEs or exceptions to WTO rules that should apply to SOEs. Finally, I consider the transparency requirements of the WTO in this regard and the fact the WTO Members, particularly China, often do not comply with them.

4.1 The Existing WTO Rules

4.1.1 Financial Advantages Granted to SOEs

Financial advantages granted to SOEs are partially caught by the following rules in the WTO. In the area of trade in goods, GATT Article III(8)(b) of GATT provides that subsidies are an exception to the national treatment obligation. The ultimate fate of subsidies in the area of trade in goods is determined under special rules governing subsidies, as prescribed in Article XVI of GATT about subsidies, Note to Article XVI in the Annexes,[706] Article VI about countervailing duties, and the Agreement on Subsidies and Countervailing Measures (the SCM Agreement). It seems that the SCM Agreement is a *lex specialis* in relation to the text of GATT Articles VI and XVI.[707] The SCM Agreement prescribes a definition of subsidies, three types of subsidies subject to different disciplines, two kinds of remedies, including CVDs and complaints to the DSB in the WTO.[708]

Subsidies are defined as a "financial contribution by a government or a public body that confers a benefit, and is specific," or "there is any form of income or price support in the sense of Article XVI of GATT 1994".[709] Export subsidies and import substitution subsidies are deemed to be specific and are prohibited.[710] Other subsidies are actionable subsidies if they cause adverse effects or serious prejudice, including (i) claims of injury to the domestic industry of another member where the importing member can bring an action at the WTO or impose CVDs, (ii) claims of nullification or impairment of benefits, in particular relating to tariff concessions of the subsidizing

[706] Annex I, Ad *Article XVI* of GATT.
[707] John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd edition (Cambridge, MA: MIT Press, 1997), 290.
[708] Article 5 of the SCM Agreement.
[709] Article 1.1(a)(2) of the SCM Agreement.
[710] Non-actionable subsidies are carved out. The provisions about non-actionable subsidies, such as R&D subsidies, environment-related subsidies and subsidies to disadvantaged regions, expired in 2000 due to the opposition to renew. *See* Article 8 of the SCM Agreement.

country so that the trading partner can bring a non-violation claim, and (iii) claims of serious prejudice to the interests of another member in the subsidized markets, including in third-country markets when a subsidy causes damage to its export opportunities on world markets.[711] So the provisions are all applicable to subsidies granted to SOEs. No distinctions are made among the recipients, i.e., whether they are POEs or SOEs.

The SCM Agreement applies only to trade in goods, excluding trade in services.[712] As to trade in services, Article XV of GATS merely prescribes negotiation obligations for Members to develop multilateral disciplines to avoid trade-distortive effects of subsidies. It also requires members to exchange information concerning all subsidies related to trade in services that they provide to their domestic service suppliers, as well as consultation obligations. To date, GATS rules on subsidies have not been developed.[713] So there are no rules relating to financial advantages granted to SOEs that are services suppliers. General rules regarding specific commitments on market access (Art. XVI of GATS) and the national treatment obligation (Art. XVII of GATS) may be applicable, but GATS rules allow subsidies to services suppliers to be excepted from the national treatment obligation.

In respect of trade-related investment, there are no specific rules regarding subsidies in the TRIMs Agreement, which is the WTO agreement regarding investment measures related to trade in goods.[714] Investment measures related to trade in services are not disciplined. Essentially, by explicit reference, the TRIMS Agreement is an application of Article III and XI of the GATT regarding the national treatment obligation and general elimination of quantitative restrictions.[715] Hence, rules are similar to those applicable to trade in goods. In contrast, financial advantages granted to SOEs, who are in competition with foreign investments related to trade in services, may not be disciplined by the WTO rules.

[711] Articles.5 and 6 of the SCM Agreement.
[712] Article 1 of the SCM Agreement expressly refers to purchases of goods but omits any reference to purchases of services, *see* Panel Report, US — Large Civil Aircraft (2nd Complaint), para. 7.968.
[713] Alan O Sykes, "The Limited Economic Case for Subsidies Regulation," E15Initiative, Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, 2015.
[714] The Agreement on Trade-Related Investment Measures (referred to as the TRIMs Agreement).
[715] Article 2 of the TRIMs Agreement.

4.1.2 Monopolies or Exclusive Rights Granted to SOEs

(1) Trade in Goods: regarding Exclusive Trading Rights

Article XVII of GATT 1994 allows the existence of monopolies and grants of exclusive rights in respect of exportation and importation. Despite that, Article XVII:3 provides a negotiation obligation to reduce such obstacles caused by state trading for the purpose of expanding international trade. It recognizes that enterprises granted exclusive rights or monopolies might be operated so as to create serious obstacles to trade, thus "negotiations designed to limit or reduce such obstacles…" are of importance.

More specifically, Article XVII:1(a) requires Members to undertake that their STEs shall "act in a manner consistent with general principles of non-discriminatory treatment prescribed in this Agreement…" and Article XVII:1(b) requires these entities to make purchases or sales solely in accordance with commercial considerations. Notes to Article XVII permit export price discrimination by STEs as long as different prices are charged for commercial reasons to meet conditions of supply and demand in export markets.[716] Taking into account that import monopolies would undermine tariff concessions, GATT Article II:4 provides that a Member that has an import monopoly, "shall ensure that its tariff concessions are not violated through the use of import monopoly power."[717]

With respect to Member states' notification obligations, Article XVII:4 provides the transparency obligation for Members about the existence of STEs and relevant products subject to them.[718] The WTO Understanding on the Interpretation of Article XVII of the GATT 1994 provides detailed procedures and rules for notification through questionnaires, including that governments are required to notify any support or benefits provided to STEs that can influence the level of imports or exports.[719]

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[716] Notes to Article XVII:1 of GATT.
[717] Kyle Bagwell and Robert W. Staiger, *The Economics of the World Trading System* (The MIT, 2002), 149.
[718] In the case of an import monopoly of a product, which is not the subject to a concession under Article II, Article XVII (4)(b) provides a notification obligation of the import mark-up or the resale price, on the request of another Member.
[719] The Working Party is set up on behalf of the Council for Trade in Goods to review notifications and counter-notifications through questionnaires. Membership of the Working Party shall be open to all Members indicating their wish to serve on it. *See* paragraph 5 of the Understanding on the Interpretation of Article XVII of the GATT 1994;

Apart from Article XVII regarding state trading, other general GATT rules such as Article III, XI, II might be applicable as well. The dispute settlement procedure in Article XXIII has been used by members based on "nullification or impairment" of GATT rules and GATT benefits by trade-distorting practices of STEs.[720]

(2) Trade in Services

Regarding monopolies or exclusive rights per se, in service areas without a market-access commitment, GATS allows the existence of service monopolies and exclusive service rights. In services areas with a market-access commitment, XVI:2 (a) of GATS limits quantitative restrictions on market access. It provides that it is prohibited to have limitations on the number of service suppliers whether in the form of numerical quotas, monopolies, or exclusive service suppliers in sectors where market-access commitments are undertaken.[721] However, this is about limitations on foreign service suppliers. It doesn't prevent the government from granting domestic monopolies and exclusive rights to domestic SOEs, to the exclusion of domestic POEs, as long as the market-access commitment is not violated. In other words, foreign service suppliers may face competition with SOEs who are granted domestic monopolies or exclusive rights.

SOEs that have been granted monopolies or exclusive service rights are partially covered by Article VIII of GATS about monopolies and exclusive service suppliers, which concerns any enterprises granted monopoly or exclusive service rights by the government.[722] Article XXVIII (h) provides that "monopoly supplier of a service" in Article VIII means "any person, public or private,

The Working Party reviews the questionnaires associated with the notifications. The questionnaire requires that all exclusive or special rights or privileges granted to the STE, as well as any other support or assistance provided by the government, are to be specified. "Technical Information on State Trading Enterprises", WTO Website, https://www.wto.org/english/tratop_e/statra_e/statra_info_e.htm

[720] Ernst-Ulrich Petersmann, "GATT Law on State Trading Enterprises: Critical Evaluation of Article XVII and Proposals for Reform," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 71-96 (University of Michigan Press, 1998), 75, citing FN 7.

[721] Paragraph 2 of Article XVI of GATS.

[722] Articles XXVIII (h) and VIII:5 of GATS.

which in the relevant market of the territory of a Member is authorized or established formally or in effect by that Member as the sole supplier of that service".

Regarding the behavior of these monopolies and exclusive service suppliers, Article VIII (1) of GATS provides that a monopoly supplier or exclusive service supplier may not act in a manner inconsistent with a member's MFN obligations and specific commitments regarding market access and national treatment.[723] Hence, a monopoly service supplier or exclusive service supplier is subject to MFN obligations. Regarding the MFN obligation imposed on a monopoly, there is a difference between GATT and GATS. Paragraph 1 Ad Note to Article XVII of GATT allows the charging by a STE of different prices for its sale of a product in different markets provided that such different prices are charged for commercial reasons to meet conditions of supply and demand in export markets. In contrast, a monopoly supplier of a service would violate MFN obligations if it charges different rates to different foreign buyers.[724] It is understandable in that a monopoly supplier of a service charges prices only in its own market, i.e., only one market, rather than various export markets where STEs sell goods. With regard to the obligation of specific commitments (NT and market access) that shall be observed by the monopoly supplier or exclusive service suppliers, the rules are only concerned with the service sector where specific commitments are undertaken. For most WTO Members, the number of service sectors subject to commitments is limited. Also, these specific commitments are subject to Article XXI of GATS regarding modification of commitments.[725]

Article VIII (1) of GATS only disciplines "supply of the monopoly service", which means that a monopoly's behavior in its input market is not subject to any discipline.[726] For instance, in the production and distribution of energy and communications services, the monopoly or exclusive service suppliers often constitute the only consumer or the major consumers of some specialized inputs. Due to the lack of competition in market for such specialized inputs, monopoly or exclusive

[723] Article VIII of GATS.
[724] Aaditya Mattoo, "Dealing with Monopolies and State Enterprises: WTO rules for Goods and Services," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 37-70 (University of Michigan Press, 1998), 41.
[725] Article XXI of GATS.
[726] Aaditya Mattoo, "Dealing with Monopolies and State Enterprises: WTO rules for Goods and Services," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 37-70 (University of Michigan Press, 1998), 39.

suppliers may use their power to purchase inputs at prices below those that would normally prevail, thereby giving themselves a cost advantage in their primary market.[727]

Apart from disciplining the supply of the monopoly service, Art. VIII (2) of GATS also disciplines the field where the entity in question competes with other service suppliers outside the scope of its monopoly rights, provided that the field of service outside the monopoly service is subject to specific commitments in its schedule.[728] It prohibits cross-subsidization for monopoly service suppliers, i.e., transferring advantages of the monopoly in the reserved sector to services outside the scope of its monopoly rights.

In respect of trade-related investment, there are no specific rules regarding monopolies or exclusive rights applicable to service providers.[729]

4.1.3 Regulatory Advantages Granted to SOEs

As to trade in goods, Article XI of GATT about General Elimination of Quantitative Restrictions may be resorted to for regulatory treatment in favor of SOEs, such as import and export barriers and restrictions.[730] Article III of GATT about National Treatment on Internal Taxation and Regulation may be resorted to for regulatory treatment in favor of SOEs, such as deregulation of SOEs and anti-trust law exemption for SOEs, and so on.[731] As to trade in services, the MFN obligation of Article II of GATS applies. Specific commitments as prescribed in Article XVI about market access and Article XVII about the national treatment obligation may be resorted to as well. As to trade-related investment in goods, there are no specific rules except for the application of Article III and XI of GATT as provided in Article 2 of the TRIMs Agreement.

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[727] Aaditya Mattoo, "Dealing with Monopolies and State Enterprises: WTO rules for Goods and Services," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 37-70 (University of Michigan Press, 1998), 37-8.
[728] Jacques H.J. Bourgeois, "EC Rules on State Monopolies and Public Undertakings: Any Relevance for the WTO?" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 161-180 (University of Michigan Press, 1998), 173-4.
[729] The TRIMs Agreement is mainly about application of the national treatment obligation and the quantitative restrictions prohibitions in GATT.
[730] Article XI of GATT.
[731] Article III of GATT.

4.1.4 Advantages Granted to Chinese SOEs

In addition to general WTO rules that are applicable to all WTO Members, China undertook special commitments under its WTO Accession Protocol and the related Working Party Report. The special commitments undertaken by China have specified different rules for disciplining SOEs and advantages they get.

(1) Financial Advantages

Article 10 (1) of the Protocol provides that China has the obligation to notify any subsidy within the meaning of Article 1 of the SCM Agreement. Article 10 (2) provides a 'specificity' rule for subsidies to SOEs, i.e., subsidies provided to SOEs will be viewed as specific if SOEs are the predominant recipients of such subsidies or SOEs receive disproportionately large amounts of such subsidies. Article 10 (3) requires China to eliminate all export subsidies, including those to Chinese SOEs. The Working Party Report, which constitutes an integral part of China's Accession Protocol to WTO, requires China to eliminate all import-substitution subsidies.[732] This means that exceptions for developing countries are not available to China.[733] Thus, China could not invoke Articles 27.8, 27.9 and 27.13 of the SCM Agreement regarding the special and differential treatment for developing countries.[734]

With regard to cheaper inputs provided by SOEs to other SOEs, paragraph b of Article 3 of the Protocol about non-discrimination can be resorted to, which particularly provides that goods and services provided by public or state enterprises, in areas including transportation, energy, basic telecommunications, other utilities and factors of production, should be in conformance with non-discrimination principles.[735] As provided in article 12 of the Protocol, regarding the agriculture sector, China is obligated to notify any fiscal and other transfers between or among SOEs in the agricultural sector and other enterprises that operate as state trading enterprises in the agricultural sector.

[732] WTO, Report of the Working Party on the Accession of China, WT/MIN(01)/3, 10 Nov. 2001, para. 168.
[733] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 10.
[734] WTO, Report of the Working Party on the Accession of China, WT/MIN(01)/3, 10 Nov. 2001, para. 171.
[735] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art.3.

Article 15 of the Protocol provides that deviations to the normal WTO rules can be applied in respect of price comparability in determining subsidies. It allows choosing a different benchmark in identifying and measuring the subsidy benefit if market economy conditions are not prevailing or if prevailing terms and conditions in China may not be available as appropriate benchmarks. This deviation doesn't have an expiration date, as opposed to the special rules on dumping cases, which expire after 15 years.[736] Usually in sectors or industries where SOEs are predominant, it is more likely that prevailing terms and conditions in China may not always be available as appropriate benchmarks.

Annex 5B of the Protocol provides that "subsides provided to certain SOEs which are running at a loss," given in the form of grants or tax breaks, are to be phased out over a period of 5 years.[737] The Protocol also provides that other subsidies need to be phased out upon China's accession to the WTO, including the priority in obtaining loans and foreign currencies based on export performance, and preferential tariff rates based on the rate of local content instead of imports used in automotive production. These subsidies are mainly enjoyed by SOEs given the fact that SOEs have easier access to loans than POEs and given that SOEs are dominant in automotive production.

(2) Advantages of Grants of Monopolies and Exclusive Rights and Privileges

With regard to the issue whether the grants of exclusive rights are allowed or not, article 5 of the Protocol provides that within three years after accession, all enterprises in China shall have the right to trade in all goods except for the list in Annex 2A.[738] This means that grants of exclusive rights regarding importation and exportation are not allowed, including grants to SOEs, except for the list in Annex 2A.[739]

[736] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, arts. 15(b) and (d).
[737] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, Annex 5B.
[738] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 5 (right to regulate); With respect to grants of exclusive rights to import or export, the following are allowed under the Protocol of China's Accession to WTO, as provided in its ANNEX 2A1 about products subjects to state trading (imports), such as crude oil, processed oil, chemical fertilizer; ANNEX 2A2 about products subject to state trading (export), such as tungsten ore, and other rare earths, minerals, coal, crude oil, processed oil, silk. (the trading rights of natural rubber, timber, plywood, and steel are to be liberalized with 3 years after accession.)
[739] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 5 and Annex 2.

With respect to the regulation of the behavior of entities granted exclusive rights to import or export, including those SOEs that have been granted such rights, in addition to GATT, Article 6 of the Protocol provides that such entities should make decisions independently from the state's influence, and are to be transparent about purchase procedures and export pricing mechanisms.[740] Another provision that might be relevant regarding regulation of the behavior of SOE monopolies or SOEs with exclusive rights, is paragraph b of Article 3 about non-discrimination. It particularly provides that goods and services provided by public or state enterprises, in areas including transportation, energy, basic telecommunications, other utilities and factors of production, to foreign individuals and enterprises and foreign-funded enterprises, shall be in conformance with the non-discrimination principle, as compared to the treatment accorded to other individuals and enterprises.[741]

(3) Regulatory Advantages

With regard to price controls, Article 9 of the Protocol provides that price controls are not allowed except for goods and services listed in Annex 4, and China shall make best efforts to reduce and eliminate these controls.[742] Under the Protocol, products subject to state pricing include natural gas. Products subject to government guidance pricing include processed oil and fertilizer. Public utilities that are subject to government pricing include electricity, gas for civilian use, tap water, heating power and water supplied by irrigation works. Service sectors that are subject to government pricing include postal and telecommunication services. Service sectors that are subject to government guidance pricing include transport services, such as rail transport of both passenger and freight, air transport of freight, port services and pipeline transport, and bank services, such as settlement, clearing and transmission services.

[740] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 6 (state trading).
[741] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 3 (non-discrimination).
[742] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 9 (price controls).

(4) Additional Commitments Relevant to Advantages Received by SOEs

The Working Party Report requires the behavior of Chinese SOEs to be based on commercial considerations, without any governmental influence or application of discriminatory measures.[743] In the area of investment, with respect to the manufacture of motor vehicle engines, China agreed to remove the 50 per cent foreign equity limit for joint-ventures upon accession.[744]

4.2 Weaknesses of the Existing WTO Rules Addressing the Problem

Most normal advantages given to SOEs can be regulated by the rules described above. However, some specific issues are not effectively covered by current rules. This section will explore those challenges that have confronted the current WTO rules or elements of rules by the various advantages granted to SOEs.

4.2.1 Financial Advantages Granted to SOEs

Apart from the coverage deficiency that the SCM Agreement is only applicable to trade in goods, rather than trade in services, or trade-related investments, several issues cast challenges to the SCM Agreement when it is applied in the context of SOEs. This is particularly true with the elements of "a government or public body" "benefit" and "specific". I would analyze the problem of SOEs giving advantages to others; the problem of SOEs in the downstream industry benefiting from SOEs in the upstream industry that receive advantages; the problem whether benefits continue to exist or not after SOEs undergo privatization; the problem of identifying a "benchmark" for finding the existence of benefits and of finding "specificity" for actionable subsidies in the context of SOEs under the SCM Agreement. The SCM Agreement is inadequate to address these problems

[743] WTO, Report of the Working Party on the Accession of China, WT/MIN(01)/3, Nov. 10, 2001, art.7, paras. 44-6, which was incorporated into the Protocol. China confirmed in WPR para. 47, which was incorporated into the Protocol, that laws and regulations relating to procurement by state enterprises would not be considered laws and regulations relating to government procurement and therefore their purchases and sales would be subject to GATT Article III and GATS Articles II, XVI and XVII.

[744] "The representative of China indicated that China was not in a position to commit to joining the Agreement on Trade in Civil Aircraft at the present stage." *See* WTO, Report of the Working Party on the Accession of China, WT/MIN(01)/3, Nov. 10, 2001, art. 7, paras. 207 and 239.

due to limitations on its subject matters, ambiguity of current legal texts, and strict standards about the legal elements of "benchmark" and "specificity".

(1) The Problem of SOEs Giving Advantages to Other SOEs

SOBs and SOEs give financial advantages to other SOEs in terms of capital and inputs, such as raw materials, energy, oil, gas, metals, minerals, electricity, water, better access to railways, and other commodities and services. Those SOEs that receive financial advantages from SOBs and other SOEs will export goods and services to foreign markets, and hence, they have comparative advantages over their competitors. Those SOEs that receive financial advantages from SOBs and other SOEs are in competition with foreign competitors in the Chinese domestic market, and hence, they have comparative advantages over their competitors. The inadequacy of the rules arises because of the limitation on subject matters in the SCM Agreement regarding who can give advantages. For a subsidy to exist, there must be a financial contribution by a government or public body. However, there is no clear answer to the question of whether SOEs can be considered to be public bodies and therefore givers of subsidies by looking at the legal texts of the SCM Agreement.

Three interpretative approaches may be utilized to address the problem within current WTO rules, i.e., the "private body" approach, the "public body" approach, and the approach of regulating the behavior of SOEs. The first two approaches are within the framework of the SCM Agreement, and the third approach is within the framework of the whole of WTO rules, particularly Members' Accession Protocols. However, all encounter difficulties.

a. The "Private Body" (entrust/direct) Approach within the SCM Agreement

Article 1.1(a)(1)(iv) of the SCM Agreement provides that

> For the purpose of this Agreement, a subsidy shall be deemed to exist if: (a)(1) there is a financial contribution *by a government or any public body* within the territory of a Member (referred to in this Agreement as "government"), i.e. where:…(iv) a government makes payments to a funding mechanism, *or entrusts or directs a private body to carry out one or more of the type of functions* illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments; (emphasis added).

In light of the purpose of the article 1.1(a)(1)(iv), which is an anti-circumvention provision,[745] the "private body" approach within the SCM Agreement treats an SOE as a private body "entrusted or directed by a government" to provide a financial contribution. Hence, benefits given by SOEs to another entity can be challenged as subsidies under the SCM Agreement, as long as two conditions can be proved, i) a link of "entrustment or direction" between the government and the SOE in question;[746] and ii) the SOE is deemed to be a private body.

The first condition

The "private body" approach encounters difficulties in satisfying the first condition in three senses. First, in WTO jurisprudence, it is complicated to prove an "entrustment or direction" link between a government and an SOE. In *U.S.-Export Restraints*, according to the Panel, the "entrusts or directs" standard requires an "explicit and affirmative action of delegation or command", rather than mere government intervention in the market."[747] The Panel in *Korea–Commercial Vessels* rejected the argument that "some degree of government ownership, by itself, constitutes proof of government entrustment or direction," and stated that "although a government ownership share in an entity may increase the ability of a government to entrust or direct that entity, there must still be evidence of an affirmative act of delegation or command before a finding of entrustment or direction may be made."[748] Therefore, the mere fact of state ownership of the SOE or that the state acts as the controller of an SOE cannot automatically imply the existence of "explicit and affirmative action of delegation or command".

In *U.S.-Countervailing Duty Investigation on DRAMs*, the AB extended the scope of actions covered by "entrustment" and "direction" beyond "delegation" and "command". It explained that "entrustment" occurs where a government gives responsibility to a private body, and "direction" occurs where the government exercises its authority over a private body and that, in both cases,

[745] WTO AB Report, US-Countervailing Duty Investigation on DRAM, WT/DS296/AB/R, adopted June 27, 2005, para. 113.
[746] Ru Ding, 'Public Body' or Not: Chinese State-Owned Enterprise, 48 (1) *Journal of* World Trade 167-190 (2014): 169.
[747] WTO Panel Report, *United States-Measures Treating Exports Restraints as Subsidies (US-Export Restraints)*, WT/DS194/R, adopted 29 Jun. 2001, paras. 8.29-8.31.
[748] WTO Panel Report, *Korea-Measures Affecting Trade in Commercial Vessels (Korea-Commercial Vessels)*, WT/DS273/R, adopted 7 March 2005, para. 7.406.

"the government uses a private body as a proxy to effectuate one of the types of financial contributions listed in paras. (i) through (iii)." It also said that involvement of some form of "threat or inducement" could serve as evidence of entrustment or direction.[749] In other words, the AB emphasized that governments have a lot of means to "entrust" or "direct" an entity, and are not limited to "command" or "delegate". The essence is that some degree of compulsion is involved. In addition, the AB excluded "mere policy pronouncements", "mere acts of encouragement" and "inadvertent or a mere by-product of government regulation" as sufficient to demonstrate the link of "entrust or direct"[750] The mere facts that the government is the controller of an entity doesn't automatically imply that "a government gives responsibility to", "a government exercises its authority over" or "threat or inducement", and hence neither does it imply the existence of the link of "entrustment or direction by a government".

Second, although the link of "entrustment or direction by a government", to some degree, has been relaxed in *US-Countervailing Duty Investigation on DRAMs*, the non-transparent relationship between the government and SOEs makes it hard to get evidence of a specific "entrustment and direction" in a particular case. Furthermore, the determination of entrustment or direction is made on a case-by-case basis, and "even if the link is established in one case, this proof of link is needed in every future case."[751] For instance, one factor that may be relevant, but not conclusive, in determining the existence of entrustment or direction under Article 1.1(a)(1)(iv) is the "commercial unreasonableness" of a financial transaction.[752] It requires examination of particular the facts of every case, and thus puts a heavy burden on the investigating authority.

Third, even if the use of circumstantial evidence is permitted, the conclusion is uncertain. On one extreme, there is exclusively private conduct, and on the other extreme, there is exclusively

[749] WTO AB Report, *US-Countervailing Duty Investigation on DRAMs*, WT/DS296/AB/R, adopted 27 June 2005, paras. 112-116.
[750] AB Report, *US — Countervailing Duty Investigation on DRAMS*, para. 114.
[751] Ru Ding, "'Public Body' or Not: Chinese State-Owned Enterprise," 48 (1) *Journal of* World Trade 167–190 (2014): 170-171; Commentaries to the ILC Draft Articles, Article 8, Commentary (5), p. 107; International Law Commission's Draft Articles on Responsibility of States for internationally wrongful acts, Report of the ILC on the work of its Fifty-third session, *Official Records of the General Assembly*, *Fifty-sixth session*, *Supplement No. 10* (A/56/10), chp. IV.E.2 ("ILC Draft Articles"). International Law Commission, Draft Articles on Responsibility of States for Internationally Wrongful Acts, U.N. Doc. A/CN.4/L.602/Rev.1 (Jul. 26, 2001).
[752] AB Report, *Japan–Countervailing Duties on Dynamic Random Access Memories from Korea (Japan — DRAMs (Korea))*, WT/DS336/AB/R, adopted 28 Nov. 2007, para. 138.

governmental conduct.[753] Somewhere in the middle, there is a mixture such as a situation might be found where an SOE engages in behavior deviating from that of ordinary market players, such as providing goods or services at lower than market prices or on terms unfavorable to itself. It is hard to categorize the above situation as exclusively private conduct. One approach adopted by the Japanese investigating authority (JIA) in *Japan–DRAM (Korea)* may shed light on the observation of the situation. In that case, JIA's finding of entrustment or direction was based on the totality of circumstantial evidence, including (i) the Government of Korea's intent to "keep Hynix alive"; (ii) that no rational creditor would have entered into the restructuring transactions in view of Hynix's poor and deteriorating financial condition; (iii) the non-commercial reasonableness of entering into the restructurings; and iv) the Government of Korea "was in a position to be able to exercise sufficient influence on" the four creditors of Hynix. In a nutshell, "the JIA found that the decisions of the four creditors to participate in the restructurings were not commercially reasonable, and could therefore only be explained by some external, non-commercial factor, namely the involvement in the restructurings of the Government of Korea."[754]

In that case, the factors of "non-commercial reasonableness" and "the government's capacity to influence" are regarded as relevant circumstantial evidence by the investigating authority, and the Panel and AB didn't reject it.

> We recognize that the *commercial unreasonableness of the financial transactions is a relevant factor* in determining government entrustment or direction under Article 1.1(a)(1)(iv) of the *SCM Agreement*, particularly where an investigating authority seeks to establish government intervention based on circumstantial evidence.[755]

In *Japan–DRAM (Korea),* Japan argued that the Korean government had *pressured* creditors to forgive obligations owed to them by the company under investigation, and had thus conferred subsidies. The Appellate Body agreed that, at least in principle, *government pressure* on private

[753] Panel Report, *US — Countervailing Duty Investigation on DRAMs*, WT/DS296/R, adopted on 21 Feb. 2005. "Situations involving exclusively private conduct—that is, conduct that is not in some way attributable to a government or public body—cannot constitute a financial contribution for purposes of determining the existence of a subsidy under the *SCM Agreement*." *See* AB Report, *US — Countervailing Duty Investigation on DRAMs*, WT/DS296/AB, adopted on 27 June 2005, para. 107.
[754] AB Report, *Japan-DRAMs (Korea)*, WT/DS336/AB/R, adopted 28 Nov. 2007, paras.117 and 119.
[755] AB Report, *Japan-DRAMs (Korea)*, WT/DS336/AB/R, adopted 28 Nov. 2007, para.138.

creditors to restructure their obligations could amount to "directing" a private body to engage in a "direct transfer of funds" and thus amount to a subsidy.[756]

In cases of SOEs giving advantages, the factor of "non-commercial reasonableness" and pressure from the government may be found. There may be more helpful circumstantial evidence in the case involving SOEs than a case involving POEs, for example, state ownership and the dynamics among the government, the Party and SOEs, are all relevant circumstantial evidence. However, some of these relevant factors have been recognized by WTO cases while others have not and the significance of each factor is not clear. It is still uncertain whether a link is established in the end even if all relevant factors are taken into account.

The second condition

Moreover, the second condition for establishing that the government has entrusted or directed a "private body" is problematic. The phrase "entrusts or directs a *private* body to carry out" in Article 1.1(a)(1)(iv), clearly requires that the entity that is directed or entrusted by a government is a private body. However, it can be disputed whether an SOE is "a private body" in the sense of Article 1.1(a)(1)(iv).[757] In addition, there is the issue of who should bear the burden of proving that the SOE in question is a private body?

From a standpoint of pure logic, a spectrum can be observed from on the one extreme, a private body without any state-owned shares, and on the other extreme, a government. This spectrum is based on the statement by the AB in *US–Anti-Dumping and Countervailing Duties (China):*

> "this provision [Article 1.1(a)(1) (iv)] introduces the concept of "private body"…the term "private body" describes something that is *not* "a government or any public body". The panel in *US — Export Restraints* made a similar point when it observed that the term "private body" is used in Article 1.1(a)(1) (iv) as a counterpoint to government or any public body, that is, any entity that is neither a government in the narrow sense nor a public

[756] AB Report, *Japan-DRAMs (Korea)*, WT/DS336/AB/R, adopted 28 Nov. 2007, para. 123.
[757] Julien Chaisse and Tsai-yu Lin (eds.), *International Economic Law and Governance: Essay in Honour of Mitsuo Matsushita* (Oxford Univ. Press 2016), 243.

body would be a private body….[758] (footnotes omitted, and emphasis added.)

An inference can be made logically that SOEs are somewhere in the middle between the two extremes, or at least SOEs are not private bodies. It is also because the definition of the word *"private"* includes "of a service, business, etc., provided or owned by *an individual rather than the state or a public body" and "of a person: not holding public office or an official position*".[759]

In summary, the "private body" approach is not sufficient to address the problem of SOEs giving advantages to others, given that the standard for satisfying the "entrust/direct" requirement is strict, i.e., it requires an explicit and affirmative action of delegation or command by the government to the entity in question, and state ownership or state control of an entity cannot automatically imply the existence of "entrustment/direction", even if relevant circumstantial evidence is taken into consideration. In addition, it is hard to argue that SOEs are private bodies.

b. The "Public Body" Approach within the SCM Agreement

Subsidies granted by SOEs may be subject to the SCM Agreement if it can be demonstrated that the SOE at issue is a "public body", and thereby subject to the same rules that restrain a government from granting subsidies. According to the SCM Agreement, one type of a subsidy is a financial contribution to an individual/individuals or entity/entities by a government or a public body. The WTO legal texts don't mention explicitly that SOEs giving advantages to others can be covered by the SCM Agreement, and neither do they mention whether SOEs can be the givers of subsidies, nor do they give a definition of the phrase "a public body". This approach differs from the "private body" approach in that the "public body" approach identifies the nature of SOEs, i.e., whether they are public bodies or not. The "private body" approach attributes the behavior of SOEs to a government. Moreover, there is no need to prove the nature of the SOE in question and other similar SOEs in future cases if the SOE in question is deemed to be a public body in the case at

[758] AB Report, *United States — Definitive Anti-Dumping and Countervailing Duties on Certain Products from China, US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/AB/R, adopted March 11, 2011, paras. 29–294. 291, 292,
[759] AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/AB/R, adopted March 11, 2011, paras. 29–294. 291, 292,

hand, while the proof of the link of entrustment or direction in the "private body" approach is needed in every future case even if the link has been established in one case.[760]

The question of what constitutes a public body should be answered prior to the question of whether SOEs are public bodies. Some authors have examined the meaning of the term "public body" from the perspectives of the literal meaning of the words in them, the context and the purpose and objective and the negotiating history of the SCM Agreement. No definition was given for the term "public body" in the SCM Agreement. The AB found the term "government" is a relevant context for interpreting the meaning of the phrase "public body".[761] Considerations of the object and purpose of the SCM Agreement do not favor either a broad or narrow interpretation of the term "public body".[762] As for negotiators' intent, the term "public body" was not in the first draft of the SCM Agreement, but was inexplicably added into the text in the second draft.[763] It was not clear what was in the mind of negotiators when adding "public body" in the provision. Therefore, the negotiating history is too ambiguous to rely upon.[764]

Four legal standards have been presented or debated so far in WTO jurisprudence in the determination of what constitutes a public body.[765] First, the "government organ/agency" standard, which views a public body as functionally equivalent to a government organ/agency, which would

[760] Ru Ding, "'Public Body' or Not: Chinese State-Owned Enterprise," 48(1) *Journal of* World Trade 167–190 (2014): 170-171.
[761] Appellate Body Report, *United States—Countervailing Measures on Certain Hot-Rolled Carbon Steel Flat Products from India (US — Carbon Steel (India))*, WT/DS436/AB/R, adopted Dec. 8, 2014, para. 4.22.
[762] Appellate Body Report, *US—Carbon Steel (India)*, WT/DS436/AB/R, adopted Dec. 8, 2014, para. 4.28; Appellate Body in *US – Anti-Dumping and Countervailing Duties (China)*.
[763] The Tokyo Round negotiation (1973-9) generated the Subsidies Code. "In this Agreement, the term 'subsidies' shall be deemed to include subsidies granted by any government or any public body within the territory of a signatory…(omitted)" *See* footnote 1 on page 18 of The Agreement on Interpretation and Application of Article VI, XVI and XXIII of the General Agreement on Tariffs and Trade. (MTN/NTM/W/236, 5 April 1979), https://www.wto.org/gatt_docs/English/SULPDF/91990092.pdf ; Document MTN.GNG/NG10/W/38, 18 Jul. 1990 & MTN/GNG/NG10/W/38/Rev.1, 4 Sep. 1990, Uruguay Round Subsidies and Countervailing Measures (SCM) Agreement Negotiating History.
[764] Ru Ding, "'Public Body' or Not: Chinese State-Owned Enterprise," 48 (1) *Journal of World Trade* 167–190 (2014): 170-171.
[765] There are four cases so far: Panel Report, *Korea Commercial Vessels*, WT/DS273/R, adopted 7 March 2005; Panel Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/R, adopted 22 Oct. 2010; AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/AB/R, adopted 11 March 2011; Recently cases reaffirm: Panel Report, *United States — Countervailing Duty Measures on Certain Products from China (US-Countervailing Measures (China))*, WT/DS437/R, 14 July 2014; AB Report, *US- Countervailing Measures (China))*, WT/DS437/AB/R, 18 Dec. 2014; Panel Report, *US-Carbon Steel (India)*, WT/DS436/R, adopted 14 July 2014; AB Report, *US-Carbon Steel (India)*, WT/DS436/AB/R, adopted 8 December 2014.

mean that SOEs are not public bodies, was rejected by panels and the AB.[766] Second, the "majority ownership" standard, which views a public body as an entity that is majority government owned, and hence SOEs are public bodies, was rejected by the AB.[767] Third, the "government control" standard, adopted by two panels, which views SOEs as public bodies since they are controlled by the government, was rejected by the AB.[768] Finally, the "vested governmental authority" standard, which was adopted by the AB, views a public body as an entity that possesses, exercises, or is vested with governmental authority. Under the last standard, only a few SOEs have been held to be public bodies in WTO jurisprudence. The last two standards of "government control" and "vested governmental authority" generated much heated debate and controversy. However, both standards are limited in their ability to address the problem of SOEs giving subsidies to others SOEs.

The "government control" standard takes the view that "control" is sufficient and treats a government's ability to control the entity in question as determinative in establishing that the entity in question constitutes a public body. In contrast, the "vested governmental authority" standard takes the view that the "ability to control" is not a determinative factor, and other factors need to be examined to determine whether "an entity possesses, exercises or is vested with governmental authority" for the purpose of finding a public body.[769] However, the literature and WTO jurisprudence to date haven't analyzed in detail the specific factors considered by each standard, or the extent to which they overlap or are similar.[770]

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[766] China argued for this standard, which is the same definition as that given by the AB to the term "government agency" in Article 9.1 of the Agreement on Agriculture, *see* AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/AB/R, adopted March 11, 2011, para. 321; Panel Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/R, paras. 8.55 and 8.59.

[767] It was once applied by the investigatory authority in U.S. in determining that relevant SOEs at issue were public bodies principally based on a rule of majority ownership, that SOEs are majority government owned. *See* AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/AB/R, para. 277.

[768] Panel Report, *Korea Commercial Vessels*, WT/DS273/R, adopted 7 March 2005, para.7.50; Panel Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/R, para. 8.73.

[769] "Subparagraph (iv) envisages that a public body may "entrust" or "direct" a private body to carry out the type of functions or conduct illustrated in subparagraphs (i)–(iii)…Thus, pursuant to subparagraph (iv), a public body may exercise its authority in order to compel or command a private body, or govern a private body's actions (direction), and may be responsible for certain tasks to a private body (entrustment)…for a public body to be able to exercise its authority over a private body (direction), a public body must itself possess such authority, or ability to compel or command. Similarly, in order to be able to give responsibility to a private body (entrustment), it must itself be vested with such responsibility..." For the reasoning by the AB, *see* Appellate Body Report, *US — Countervailing Duty Investigation on DRAMS*, paras. 111 and 116, paras. 29–294.

[770] For more debate about whether SOEs are "public bodies" within the SCM Agreement, *see* Ru Ding, 'Public Body' or Not: Chinese State-Owned Enterprise, 48 (1) *Journal of World Trade* 167-190 (2014): 169; Mark Wu, "The 'China,

The "government control" standard

With regards to the "government control" standard, it refers to "the everyday financial concept of a "controlling interest" in a company", which is defined as

> "The technical definition of what is needed for a controlling interest is *a maximum of 50 per cent plus one share of the voting stock* of a company, with the possibility that a much smaller voting block can be controlling, depending on how dispersed the ownership of the remaining shares is, and the extent to which the other shareholders participate in voting." (footnote omitted, emphasis added.)[771]

In terms of evidential factors for the "government control" standard, the factor of "government ownership" is considered as highly relevant (indeed potentially dispositive) evidence of government control.[772] "On its own, majority government ownership is clear and highly indicative evidence of government control, and thus of whether an entity is a public body for purposes of the SCM Agreement."[773] It gives "primacy to evidence of majority government-ownership".[774] Recognizing that public body determinations are to be made case-by-case, and

> "there could be cases (however rare in practice) in which a government-owned entity was completely *insulated* (e.g., by law) from any government involvement in, or influence over, *its operations*, such that the entity *was not controlled* by the government…In such a situation, it would *be the entity and the government in question* that would have in their possession the information as to the absence of government control, and in our view it would be incumbent upon them, and certainly it would be in their interest, *to bring that information* to the attention of the investigating authority. To the extent that such evidence were placed on the record, the investigating authority would be required to include its analysis of that evidence in its determination as to whether the entity was or was not a public body." (emphasis added.)[775]

Inc.' Challenge to Global Trade Governance," *Harvard International Law Journal*, Vol. 57 (May 13, 2016); For critics of AB's standard from the perspectives of interpretative method and legal implications, *see* Michel Cartland, Gerard Depayre and Jan Woznowskl, "Is Something Going Wrong in the WTO Dispute Settlement?" 46 *J. World Trade* 979, 2012.

[771] Panel Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/R, para. 8.134, in its footnote 256, the Panel cited various definitions of financial concept of a "controlling interest" in a company.

[772] Panel Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/R, para. 8.134.

[773] Panel Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/R, para. 8.135.

[774] Panel Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/R, para. 8.136.

[775] Panel Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/R, para. 8.136.

It can be summarized that under this statement evidence of "majority government ownership" *alone* is *sufficient* to satisfy the "government control' standard, and hence, to establish the entity in question is a public body, *unless it can be proved otherwise* by the entity and the government concerned that the control is absent.

The Panel that adopted the "government control" standard also considered and analyzed other factors, such as the existence of meaningful control and the nature of the entity. In *Korea Commercial Vessels*, the Panel found that the entity in question was a public body *primarily* based on the evidence that it was 100 per cent owned by the government or other public bodies. Nevertheless, the Panel also stated that the operations of the entity were conducted by presidents who were appointed and dismissed by the government, and mentioned that the government enjoyed extensive control over the parameters within which the entity in question (KEXIM) must operate. The Panel found that KEXIM would follow whatever the government directed or asked it to do. Also, the Panel considered that the "public" nature of KEXIM is further confirmed by KEXIM's own perception of itself.[776]

Therefore, I think the Panel in this case also considered the factor of "meaningful control". However, the "government control" standard considers the factor of meaningful control as unnecessary, and the factor of "formal (i.e., majority voting) control" alone is decisive and sufficient to find the existence of a public body.[777] In addition, the panel takes the view that whether "an entity [was] operating on a commercial basis" was not relevant for deciding whether the entity was a public body or not. Rather, whether it "operated on a commercial basis" was relevant for the "benefit" analysis in the subsidization analysis of the SCM Agreement.[778] It also considered the "pursuance of public policy objectives" as an unnecessary factor in finding a public body.[779]

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[776] Panel Report, *Korea Commercial Vessels*, WT/DS273/R. para. 7.50.
[777] As to the distinction between "formal control" and "meaningful control", the former can be evidenced by majority ownership or majority voting, while the latter means that the daily operation of the entity, and decision-making of the entity is not independent. For instance, under "formal control", the managers of the entity enjoy large discretion in terms of making decisions regarding daily operation of the entity, without much interference from the majority owner. The managers/CEO are more likely to be independent, and behave like professional managers, although their appointments are largely influenced by the majority owner. Under "meaningful control", the shareholders (majority owners) have extensive control over the mangers' decision making in daily operation of the entity.
[778] Panel Report, *Korea Commercial Vessels*, WT/DS273/R, paras 7.45-7.50.
[779] Panel Report, *Korea Commercial Vessels*, WT/DS273/R, para.7.50.

The "vested governmental authority" standard

With regards to the "vested governmental authority" standard, first, it takes the view that if a statute or other legal instrument expressly vests governmental authority in the entity concerned, it is easy to establish that the entity is a public body.[780] Second, in the absence of an express statutory delegation of governmental authority,[781] relevant factors or evidence to establish vested governmental authority include ownership, control, meaningful control, appointments of managers in high positions and policy mandates. All the various relevant factors or evidence need to be examined in order to find the existence of "entities vested with governmental authority". In *US–China AD/CVD*, SOBs were found to be public bodies based on evidence relating to the Government of China's role in the banking industry summarized as follows: i) state-ownership of SOBs; ii) state control over SOBs, such as state instructions for the banks, SOB's lack of independence (lack of risk management and analytical skills, following state policies) *in lending decisions*; iii) appointment of chief executives by the state or influenced by the Party;[782] iv) SOBs required to support China's industrial policies; and v) SOBs *meaningfully controlled by the government in the exercise of their functions*. These considerations and evidence, taken together, were found to demonstrate that the SOBs concerned exercise governmental functions on behalf of the Chinese Government.[783]

Third, the AB, which has adopted the "vested governmental authority" standard, thinks that all relevant factors can serve as evidence. One factor is not sufficient and determinative, and an investigating authority must "avoid focusing exclusively or unduly on any single characteristic without affording due consideration to others that may be relevant".[784] In *U.S–China AC/CVD*, the AB viewed the factor of "meaningful control" as relevant evidence for exercising governmental functions, by stating that:

[780] AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/AB/R, para. 318.
[781] "What matters is *whether* an entity is vested with authority to exercise governmental functions, rather than *how* that is achieved." *See* AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/AB/R, para. 318.
[782] AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/AB/R, paras. 349-350.
[783] AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/AB/R, para. 355.
[784] AB Report, *US — Carbon Steel (India)*, WT/DS436/AB/R, adopted Dec. 8, 2014, paras.4.20 and 5.37.

> "It follows that evidence that a government exercises meaningful control over an entity and its conduct may serve, in certain circumstances, as evidence that the relevant entity possesses governmental authority and exercises such authority in the performance of governmental functions. In some instances, however, where the evidence shows that the formal indicia of government control are manifold, and there is also evidence that such control has been exercised in a meaningful way, then such evidence may permit an inference that the entity concerned is exercising governmental authority".[785]

It might be inferred from the AB's statement above that evidence about formal control plus meaningful control may satisfy the standard of vested authority. However, the case of *US–Carbon Steel (India)* clarifies "meaningful control" and its relative weight. It held that "meaningful control" is relevant, but not decisive and exclusive. The substantive standard should be distinct from the evidentiary standard.[786] The AB thinks it is wrong to construe the term "public body" to mean any entity that is "meaningfully controlled" by a government. In other words, the factor of "meaningful control", similar to other factors, only has evidential weight, rather than the weight of serving as the substantive standard.

Overall, the two standards accept that formal control, meaningful control and other factors are relevant. The only difference may lie in the different weights and significance attached to each factor. The "government control" standard treats the factor of "control" as the decisive matter, while the "government authority" standard holds that there is not a single factor that can be determinative, and that there is a need to consider all relevant factors in conjunction.

Limitations in general

There are limitations in using these two standards to address the problem of SOEs giving financial advantages to other SOEs. With regards to the "government control" standard, it would be unreasonable to treat all SOEs as public bodies. Although case-by-case analysis is allowed, the burden of proof is imposed on the entity and the government concerned to demonstrate that there is no control in existence. Logically, it is harder to prove the absence of government control than to prove the presence of government control.

[785] AB Report, *US – Anti-Dumping and Countervailing Duties (China),* WT/DS379/AB/R, para. 318.
[786] AB Report, *US — Carbon Steel (India),* WT/DS436/AB/R, adopted Dec. 8, 2014, para. 4.37.

Second, the consequences of the "government control" standard may give rise to the concern of legal fragmentation at the international level. If SOEs are deemed to be public bodies in the WTO according to the "government control" standard, there might be legal fragmentation in that SOEs are accorded different status at the international level. In the international business community, it is widely accepted that the behavior of SOEs, who are doing merely commercial activities, or who are merely commercial entities, cannot be attributed to the state. In the international investment area, private entities can bring investment claims against the host state under bilateral investment treaties or free trade agreements while the state is not allowed to bring such claims. In practice, SOEs usually have the standing to bring such investment claims. To that end, SOEs are not deemed to be governments, and the behavior of SOEs---bringing an investment claim---is not attributed to their government.

Last, the consequences of the "government control" standard may give rise to the concern of legal fragmentation at the WTO level. The rule of treating SOEs as "public bodies" may work within the SCM Agreement, rather than within all WTO rules. It casts limits on the scope of the rule and creates different treatments of SOEs within the WTO, i.e., treating SOEs as public bodies in the context of subsidies while treating SOEs not as public bodies in the context of non-subsidies. Hence, legal fragmentation arises within the WTO.

In contrast, the "vested governmental authority" standard is too narrow in that most SOEs are not covered by it. Only in one case has the AB held that state-owned banks (SOBs) are deemed to be public bodies, while the AB in the same case decided that other SOEs are not public bodies within the SCM Agreement.[787] The AB in *US–Carbon Steel (India)* held that the National Mineral Development Corporation (NMDC) is not a public body within the meaning of Article 1.1(a)(1) of the SCM Agreement.[788]

Second, the "vested governmental authority" standard creates uncertainty. It needs a case-by-case analysis given that the demonstration of "possesses, exercises, or is vested with governmental authority" is needed in every future case. The answer remains unclear as to the question of whether

[787] AB Report, *US – Anti-Dumping and Countervailing Duties (China),* WT/DS379/AB/R, para. 347.
[788] AB Report, *US — Carbon Steel (India),* WT/DS436/AB/R, adopted Dec. 8, 2014, paras. 4.1-4.55.

SOEs can be deemed to be public bodies, in that the answer is dependent on the evidence found in every case.

Furthermore, it seems that the AB doesn't attach different weights to different factors, except for stating that all relevant factors shall be examined conjunctively. It seems that all relevant factors are assigned similar weight. It provides little guidance for practice. For instance, as for the "meaningful control" factor, the AB in *US–China AD/CVD* relied heavily on the "meaningful control" factor in finding SOBs as public bodies within the SCM Agreement.[789] While the AB in *US–Carbon Steel (India)* clarified that the "meaningful control" factor, which is similar to other relevant factors, shall not be assigned a decisive weight.[790] However, in the latest case of *US-Countervailing Measures (China)*, the Panel seemed to follow the earlier case, noting that the "meaningful control" factor was weighted significantly by the AB in *US–China AD/CVD*.[791] It might be better to clarify, at least, the weight assigned to each factor.

Limitations in the context of Chinese SOEs

The above two standards are also problematic when they are applied in the context of Chinese SOEs. The AB explained that among other relevant factors to be considered are the legal order,[792] *economic environment prevailing in the country, the scope and content of government policies relating to the sector in question, etc. based on each case's own merits,* by stating that

> "whether the conduct of an entity is that of a public body must in each case be determined *on its own merits*, with due regard to the core characteristics and functions of the relevant entity, its relationship with the government, and the legal and *economic environment prevailing in the country* in which the investigated entity operates." For example, "evidence regarding *the scope and content of government policies relating to the sector* in which the investigated entity operates may inform the question of whether the conduct of an entity is that of a public body."[793] (emphasis added.)

[789] AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/AB/R, para. 318.
[790] AB Report, *US — Carbon Steel (India)*, WT/DS436/AB/R, adopted Dec. 8, 2014, para. 4.37.
[791] Panel Report, *United States-Countervailing Duty Measures on Certain Products from China (US Countervailing Measures (China))*, WT/437/R, adopted 14 July 2014, para.7.74.
[792] AB Report, *US — Carbon Steel (India)*, WT/DS436/AB/R, para. 4.54; Panel Report, *US — Carbon Steel (India)*, WT/DS436/R, para. 7.66, in that case, the public body issue was not appealed since the panel applied the "vested governmental authority" standard.
[793] AB Report, *US — Carbon Steel (India)*, WT/DS436/AB/R, para. 4.29.

However, the elements and factors mentioned above are not assigned significant weights except for "relevance". Most cases are brought by a WTO member to complain about the countervailing measures imposed on products exported by their SOEs to an importing country. Hence, panels evaluate whether the investigating authority in the importing country has conducted a thorough examination through all relevant factors in determination of whether the SOE in question constitutes a public body. Most investigating authorities only or primarily rely on the ownership factor, and hence their decisions are found to be inconsistent with the SCM Agreement. In that sense, it remains to be seen whether panels in future cases will state in general that factors like legal order, economic environment prevailing in the country, the scope and content of government policies relating to the sector in question, etc. based on each case's own merits, etc. should be examined, or will further emphasize the respective significant weight assigned to each factor.

In the context of Chinese SOEs, many factors would seem to be relevant: the factor of which industry the SOE is in; the factor of whether the industry/sector concerned is categorized under strategic industries or pillar industries or normal industries; the factor of whether there are related governmental policies to encourage and support the industry concerned; the factor of market structure of the industry and the market power enjoyed by the SOE, particularly whether the SOEs benefit from monopoly and exclusive rights; the factor of the extent to which various advantages are granted to the industry, and SOEs in particular; and etc. I think these factors should play significant roles in the determination of whether a Chinese SOE is a public body or not since these factors are typical in the context of Chinese SOEs.

Taking the factors of the industry the SOE is in and of whether the SOE has been granted monopolies or exclusive rights as an example, except for SOBs which have already been found to be public bodies, SOEs in strategic industries, such as coal, airline and aviation, telecommunication, petroleum and petrochemical, shipping and manufacturing of ships, and electricity, are more likely to satisfy both the "government control" standard and "vested governmental authority" standard. In contrast, SOEs in pillar industries, such as steel, non-ferrous metal, automotive and auto parts, machinery and equipment, information technology, are less likely to satisfy the "vested governmental authority" standard, although the "vested governmental

authority" standard may be satisfied in industries with SOE blocs, such as steel, non-ferrous metals, and automotive industries. One major difference in the above two sets of industries lies in the fact whether SOEs have monopolies or exclusive rights in the industry they are in respectively, and whether the competition is limited in favor of SOEs to the detriment of POEs in terms of entry, importation, exportation, distribution, and so on.

For instance, in cases of *China–US AD/CVD* and *China–US AD*,[794] the products under investigation were petrochemicals, rubber, steel (produced by Baosteel), steel pipe, tires, pipe and tube, woven sacks, thermal paper, pressure pipe, citric acid, kitchen appliance shelving and racks, lawn groomers, print graphics, aluminum extrusions, steel cylinders, steel sinks, etc. produced by SOEs. I think these products were produced by SOEs who are in different industries/sectors, with different market structures, with different extent of presence (SOEs dominate or significantly present in the sector), and with different degree of government supports.[795] These factors should warrant significant considerations and differential treatment as to the question whether the SOE in question constitutes a public body or not.

c. The Approach of Regulating the Behavior of SOEs

The above two approaches of "private body" and "public body" are in the context of subsidies within the SCM Agreement. This section discusses the approach of regulating the behavior of SOEs in the context of the WTO rules generally, especially the protocols made by Members.

Giving advantages to others by SOEs can be categorized as one behavior the SOEs conduct. Such conduct may give rise to the level of discriminatory behavior or decision-making by the SOEs based on non-commercial considerations. Hence, the approach of regulating the behavior of SOEs

[794] Panel Report, *US – Anti-Dumping and Countervailing Duties (China)*, WT/DS379/R; Panel Report, *United States-Countervailing Duty Measures on Certain Products from China (US Countervailing Measures (China))*, WT/DS437/R, July 14, 2014.

[795] For instance, in the cement and glass industries, which have not been mentioned in the above section, both SOEs and POEs are players in the competitive markets, being quite different from other monopolistic markets dominated by SOEs. (Profit in the cement and glass industries is not so high, and they rely on large sales). *See* "A case study by Harvard: the development of the cement industry in China," Shanghai Securities Newspaper, Nov. 7, 2012, http://finance.sina.com.cn/stock/hyyj/20121107/025313597055.shtml

can address the problem of SOEs giving advantages to other SOEs, particularly providing goods or services at lower prices or on favorable terms.

Paragraph b of article 3 of China's Accession Protocol can be resorted to since it provides that the prices and availability of goods and services provided by public or *state enterprises*, in areas including transportation, energy, basic telecommunications, other utilities and factors of production, should be in conformance with the non-discrimination principle, by stating

> **Article 3 of Protocol China Accession to WTO: Non-discrimination**
> Except as otherwise provided for in this Protocol, foreign individuals and enterprises and foreign-funded enterprises shall be accorded treatment no less favourable than that accorded to other individuals and enterprises in respect of:
> (a) the procurement of inputs and goods and services necessary for production and the conditions under which their goods are produced, marketed or sold, in the domestic market and for export; and
> (b) the prices and availability of goods and services supplied by national and sub-national authorities and public or state enterprises, in areas including transportation, energy, basic telecommunications, other utilities and factors of production.[796]

A claim under this provision would be based on differentiated pricing practices. The general exception to the national treatment obligation for domestic subsidies in GATT is not applicable since the claim is about pricing practices, not subsidization.

However, the specific commitment is only applicable to China. Besides, the non-discriminatory obligation only works in domestic markets. Moreover, this particular rule only works in one segment of domestic market where FOEs are present. In other words, it only works in a situation where SOEs give advantages to other SOEs who are in competition with FOEs (foreign individuals and enterprises and foreign-funded enterprises) that produce goods or services in China. In practice, there are few FOEs in the Chinese domestic market in the abovementioned segments. It doesn't work in situations where SOEs give advantages to other SOEs who are in competition with

[796] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 3 (non-discrimination).

imported goods, or where SOEs give advantages to other SOEs who export goods or services to importing markets.

What's worse, WTO rules currently do not regulate behavior of SOEs in general, let alone the obligation of commercial considerations for SOEs, except for those SOEs with exclusive trading rights, which will be discussed in detail in section 2.2.2.

Conclusion of (1)

In summary, the problem of SOEs giving advantages to other SOEs is not sufficiently addressed by the current WTO rules in that the "private body" approach within the SCM Agreement faces difficulty in proving the link of entrustment or direction between the government and the SOE in a particular case, and in proving that SOEs are private bodies.

The problem of SOEs giving advantages to other SOEs is not sufficiently addressed by the "public body" approach within the SCM Agreement in that the legal standards and evidential factors for the question of what constitutes a public body have limitations in WTO jurisprudence. Particularly in the context of Chinese SOEs, the standard of "government control" or "vested governmental authority" either results in too many or too few SOEs being found to be public bodies. In addition, insufficient attention is given to the factors of which industry the SOE is in and of whether the SOE has been granted monopolies or exclusive rights, and other factors that are typical in the context of Chinese SOEs.

The problem of SOEs giving advantages to other SOEs is not sufficiently addressed by the behavior rules in the WTO, particularly the protocols. The specific commitment made by China only applies partially to the situation where SOEs give advantages to other SOEs. The WTO rules in general do not regulate the behavior of SOEs directly.

(2) The Problem of Upstream Subsidies in the Context of Chinese SOEs

Input subsidies and upstream subsidies refer to subsidies granted to an input purchased by the downstream industry, which is in competition with imports or which exports to foreign markets.[797] There are four situations of concern to my analysis, i.e., situation 1 is where SOEs dominate both the upstream industry and the downstream industry; situation 2 where POEs dominate the upstream industry and SOEs dominate the downstream industry; situation 3 where SOEs dominate the upstream industry and POEs dominate the downstream industry; and situation 4 where POEs dominate both the upstream industry and the downstream industry. Typically, it is situation 4 where POEs are major players both in the upstream and downstream industries, that is kept in mind when most literature discusses whether upstream subsidies can be deemed to be subsidies for the downstream industry and analyses the difficulties encountered under the subsidies rules, i.e., the SCM Agreement.

Situations 1, 2, and 3 are worthy of attention given that SOEs are either the major player in the upstream industry or the downstream industry or both. Particularly in situation 1 where SOEs in the upstream industry receive financial advantages from the government, and then provide goods or services to the downstream industry dominated by SOEs, which are in competition with foreign producers, it is likely that SOEs in the downstream industry indeed benefit from the advantages in this regard. For instance, in the context of Chinese SOEs, financial advantages are granted by the government to the coal industry, in which SOEs are major players. The coal industry is the upstream industry in relation to the steel industry, in which SOEs are the major players in China. Actually, the steel industry receives advantages of three types: i) SOEs in the coal industry receive advantages from having better access to railways *for transporting coal used for generating electricity*, and the steel industry gets better deals from the electricity companies for purchasing electricity in large quantities directly rather than purchasing on-grid electricity; ii) SOEs in the coal industry receive advantages from having better access to railways for transporting coal used for producing steel; and iii) the coal industry also gets compensation specifically for supporting the steel industry by providing coal at lower prices. Examples can be found in Pinding Shan Tian

[797] Gary Clyde Hufbauer and Joanna Shelton-Erb, *Subsidies in International Trade* (The MIT Press, 1984).

AN Coal Ltd. (an SOE).[798] This situation is also typical in the chemicals, petrochemicals, and non-ferrous metals industries, such as aluminum. Legal texts don't address this situation directly. However, four approaches may be put forward to address this situation through current rules. Nonetheless, all of them encounter difficulties, particularly in the context of Chinese SOEs.

a. The Subject Approach

The subject approach treats the upstream SOEs as public bodies, who are givers of subsidies through the provision of goods or services. This approach is about identifying the nature of SOEs, the difficulty of which has been discussed in the section above. Working in situation (1), it treats the recipients of subsidies in the upstream industry, for instance, SOEs in the coal industry, as public bodies, capable of giving benefits (cheaper inputs) to the downstream industry, for example the steel industry, in which the majority of producers are SOEs. Hence, where Chinese steel products are in competition with foreign steel products, the subsidies at issue are challengeable under the WTO framework. This approach can also be applicable to situation 3 where the steel producers are privately owned. This policy of ensuring coal SOEs' access to railways for coal designated for electricity and steel usage has largely benefited coal SOEs, while it is against the interests of railways themselves.[799] The difficulty in identifying SOEs as public bodies has been explained in the section 1.1.2.

b. The Recipient Approach

The recipient approach is to treat the upstream SOEs and downstream SOEs as related entities as if they were part of one group of related companies. In such a case, both the upstream and downstream SOEs are viewed as direct recipients of the subsidies.

[798] For more information about the specific facts of granting advantages, *see* Chapter Two about the coal and steel industries, SOEs as givers of advantages, and regulatory advantages. The example of Pingding Shang Tian An Coal Ltd receiving compensation for providing lower prices of coal can be found in its annual financial reports (Shanghai Stock Exchange) from 2008-2014.

[799] "Railway authority in Ha'er bing Province adopted policy to secure that coal is transported to markets in order to reduce pressure from high demand for electricity nationwide," June 11, 2016. http://nlhw.bgzxv.com/gjzj/9262.html

In *US-Softwood Lumber IV*, it was held that that subsidization of inputs does not per se constitute subsidization of the final product.[800] In *US–Softwood Lumber III*, the Panel concluded that it "may not assume that a subsidy provided to producers of the 'upstream' input product automatically benefits unrelated producers of downstream products, especially if there is evidence on the record of arm's-length transactions between the two."[801] The Panel concluded that where there is "*complete identity* between the tenure holder/logger and the lumber producer, no pass-through analysis is required."[802] In *US–Softwood Lumber IV*, it was held that if two industries operate at arm's length, a "benefit pass-through" analysis is needed.[803] It can be inferred that if the two producers do not operate at arm's length or if there is complete identity between the two producers, a "benefit pass-through" analysis is not necessary, since these two producers can be deemed to be one. In that sense, the producers of the processed products are also direct recipients of subsidies.

The same logic can be applied to the case of SOEs to examine whether SOEs in the upstream industry and downstream industry are related or not. It can be argued that the state is the major shareholder or controller of the two SOEs, and hence, SOEs in the upstream industry and downstream industry can be treated as related entities or their transactions can be viewed as not at arm's length in this regard. Furthermore, from the perspective of accounting, there might be one financial report for the whole corporate group. This argument works well especially in a situation where the parent SOE is subsidized for its products, which are inputs for subsidiary SOEs, who produce the processed products. For instance, in natural resources industries, vertical integration is common in China. The SOE in the exploration sector is usually a sibling of an SOE in the processing sector. To that end, the upstream subsidies can be deemed to be subsidies for the downstream industry. Subsidization of inputs, produced by the upstream SOEs, can be deemed to be subsidization of the final product, produced by the downstream SOEs.

[800] AB Report, United States — *Final Countervailing Duty Determination with respect to certain Softwood Lumber from Canada (US-Softwood Lumber IV*), WT/DS257/AB/R, adopted 19 Jan 2004.
[801] Panel Report, *United States — Preliminary Determinations with Respect to Certain Softwood Lumber from Canada* (*US — Softwood Lumber III)*, WT/DS236/R, adopted 27 Sep. 2002. (The case was not appealed with mutually agreed solution on 12 Oct. 2006), para. 7.71.
[802] Panel Report, *US — Softwood Lumber III*, paras. 7.72 and 7.74.
[803] AB Report, *US-Softwood Lumber IV*, WT/DS257/AB/R, adopted 19 Jan 2004, paras. 152-166.

However, opposing arguments exist that the key test for whether two entities are related or not lies in whether the transaction in question is conducted at arm's length. It is not reasonable to treat all sibling SOEs as one entity regardless of the nature of transactions in practice. In addition, from a business viewpoint, it may be hard to demonstrate that SOEs in the upstream industry and SOEs in the downstream industry are in one group, particularly if they operate in different industries, produce different products, keep separate accounts and so on.

c. The Approach of "Benefits Pass-Through"

The analysis of "benefits pass-through" examines "whether and to what extent the subsidies bestowed on the upstream producers benefited the downstream producers."[804] As noted above, in *US — Softwood Lumber III,* the Panel's viewed that an investigating authority "may not assume that a subsidy provided to producers of the 'upstream' input product automatically benefits unrelated producers of downstream products, especially if there is evidence on the record of arm's-length transactions between the two."[805] In *US–Softwood Lumber IV,* the AB stated:

> "If countervailing duties are intended to offset a subsidy granted to the *producer of an input product*, but the duties are to be imposed on the processed product (and not the input product)... In such a case…*especially when the producers of the input and the processed product are not the same entity*…it [investigating authority] must also establish that t*he benefit resulting from the subsidy has passed through, at least in part, from the input downstream, so as to benefit indirectly the processed product to be countervailed*…Where the input producers and producers of the processed products operate at *arm's length*, the pass-through of input subsidy benefits from the direct recipients to the indirect recipients downstream cannot simply be presumed."[806] (emphasis added.)

In a nutshell, in the case of subsidies granted to upstream producers, if the upstream producers and downstream producers are unrelated, and they operate at arm's length, it cannot be assumed that the downstream producers also receive benefits, and hence, an analysis of "benefits pass-through" is needed.

A "benefits pass-through" analysis "examines whether subsidization of the upstream industry

[804] Panel Report, *US — Softwood Lumber III*, WT/DS236/R, adopted 27 Sept. 2002, para. 7.71.
[805] Panel Report, *US — Softwood Lumber III*, WT/DS236/R, adopted 27 Sept. 2002, para. 7.71.
[806] AB Report, *US — Softwood Lumber IV*, WT/DS257/AB/R, paras. 142-3.

results in the provision of inputs by the upstream industry at a cheaper price than the price prevailing on world markets."[807] In the context of SOEs in the similar situation of subsidized inputs, the "benefits pass-through" analysis is needed to prove that there are benefits flowing from the upstream industry to the downstream industry, evidenced by, for instance, low pricing of goods or services provided by the upstream SOEs to the downstream SOEs. If the upstream subsidies (coal subsidies) led to prices of coal lower than the normal market prices in China (world prices are usually the benchmark), a potential subsidy might exist with respect to the downstream industry such as the steel industry.

In the context of Chinese SOEs, taking the steel industry as an example, first, SOEs in the coal industry receive advantages from railways (SOEs) in having better access to railways for transporting their coal designated for generating electricity, and prices of coal sold to electricity companies (almost all are SOEs) are lower than the prices when coal is sold to other sectors. The steel companies usually approach electricity companies for direct power purchase at prices lower than on-grid electricity. Second, SOEs in the coal industry also receive advantages from railways (SOEs) in having better access to railways for transporting their coal designated for producing steel. Third, in some cases, the coal industry receives subsidies with specific direction that it is compensating them for providing coal at lower prices to the steel industry (usually the title of subsidies granted in this regard specifically state that the subsidies are for compensating the coal industry for their encouraging and supporting the steel industry).[808] Hence, the government imposes conditions on the subsidized industry (the majority of which are SOEs and requires them to sell at bargain prices to the downstream industry (the majority of which are SOEs. The consequence is that the steel industry benefits from lower cost coal, electricity and transportation. Other examples can be found.

As a practical matter, it be may difficult to show that benefits flow from the upstream sector to the downstream sector through lower pricing. Due to difficulty in finding information in light of non-transparency, it is hard to find whether there are explicit governmental policies, and it is hard to

[807] William R. Cline (ed.), *Trade Policy in the 1980s*, 1st edition (MIT Press, 1983), 352-3.
[808] *See* Chapter Two about the coal industry.

find evidence in respect of "benefits pass-through". I found some scattered evidence.[809] Usually, what is relevant are not laws on the books, but governmental policies by different levels of governments. In addition, it is difficult to prove that inputs are provided at cheaper prices than the prices prevailing on world markets or prices under market conditions.

d. The Approach of Channeling Through "Income or Price Support" Within the SCM Agreement

The last approach is related to a specific situation where subsidies are granted to the upstream SOEs for the purpose of maintaining prices in the domestic market. This situation may involve "income or price support" within the meaning of Article 1.1(a)(2) of the SCM Agreement, which provides that "a subsidy shall be deemed to exist if there is any form of income or price support in the sense of Article XVI of the GATT 1994". Subsidies to the upstream SOEs can be viewed in totality as a scheme of income support, for instance, which leads to lower prices of coal/energy for the steel industry.

However, while this GATT provision was incorporated into the SCM Agreement, it is mainly of historical interest, cases today are normally brought under the more detailed provisions of the SCM Agreement.[810]

Conclusion of (2)

As for the problem of SOEs in the downstream industry which benefit from transactions with subsidized SOEs in the upstream industry, the various approaches that are available within the current WTO rules are all inadequate to address the problem. In respect of the subject approach, it may be easy to find some SOEs are public bodies while it is hard to conclude the same for other SOEs depending on the industry/sector they are in and the nature of the SOE. In respect of the recipient approach, it is hard to treat two separate SOEs in the upstream and downstream sectors as one group of related companies although some arguments can be made. In respect of the

[809] *See* Chapter Two.
[810] WTO Analytical Index: GATT 1994, Article XVI.
https://www.wto.org/english/res_e/booksp_e/analytic_index_e/gatt1994_06_e.htm

"benefits pass-through" approach, it is difficult to find evidence of lowering prices. The approach of "price or income support" is mainly of historical interest.

(3) Chinese SOEs Receive Financial Advantages Before and During Their Privatization

First, Chinese SOEs receive financial advantages prior to privatizations. Second, Chinese SOEs receive lots of financial advantages for the reconstruction and privatization, the analysis of which is similar to the analysis of subsidies granted prior to privatization. After privatization, some of these entities continue to engage in international markets. Problems arise if benefits from subsidies granted to SOEs prior to privatization continue to exist, and hence, the entity after privatization will have comparative advantages over its competitors.

The WTO rules on privatizations and their effect on the actionability of prior subsidies are confusing. In the early cases of *US–Lead and Bismuth II* [811] and *US–Countervailing Measures on Certain EC Products,*[812] it was held that the full privatization at arm's length and for fair market value of an SOE that received prior non-recurring subsidies can give rise to a rebuttable presumption that the benefit conferred by prior subsidies is extinguished. The AB stated:

> "changes in the ownership of a subsidized producer give rise to a rebuttable presumption that the benefit conferred by prior subsidies is extinguished ... this would only be where (i) benefits resulting from a prior nonrecurring financial contribution, (ii) are bestowed on a state-owned enterprise, and (iii) following a privatization at arm's length and for fair market value, (iv) the government transfers all or substantially all the property and retains no controlling interest in the privatized producer.[813]

Literature analyzed the distinction between wealth enhancing benefit and competitive benefit, that is, a benefit that reduces the cost of production. From an economic viewpoint, the productive

[811] Appellate Body Report, *United States — Imposition of Countervailing Duties on Certain Hot-Rolled Lead and Bismuth Carbon Steel Products Originating in the United Kingdom* (*US – Lead and Bismuth II)*, WT/DS138/AB/R, adopted 10 May 2000, para. 68.
[812] AB Report, *United States — Countervailing Measures Concerning Certain Products from the European Communities (US – Countervailing Measures on Certain EC Products)*, WT/DS212/AB/R, adopted 9 Dec. 2002.
[813] Appellate Body Report, *United States — Countervailing Measures Concerning Certain Products from the European Communities (US – Countervailing Measures on Certain EC Products)*, WT/DS212/AB/R, adopted 9 Dec. 2002, para. 117; Panel Report, *European Communities — Measures Affecting Trade in Large Civil Aircraft (EC and Certain Member States — Large Civil Aircraft)*, WT/DS316/R, adopted 30 June 2010, para. 7.248.

capacity would not exist but for the government's uneconomical initial investment.[814] The fair market price of privatization only affected the wealth of the buyers and the sellers, not the marginal cost of production or the competitive advantage. The European position (adopted by AB) in *British Lead Bismuth* was that "benefit" refers only to the wealth of the producer of the allegedly subsidized goods. The effect of the government program on production is irrelevant, and causation is not part of the definition. The US argued that it is a company's productive operations that are relevant to the determination of whether a subsidy exists. This view requires that causation (financial contribution alters producers' production) be part of the SCM Agreement's definition and that "benefit" mean "competitive benefit".

However, in *EC and certain member States–Large Civil Aircraft*, the issue was more complex and the outcome less clear. First, the case was brought in 2010, while most alleged subsidies were granted decades ago (1990s, 1980s, and 1970s) and some lasted for decades. The U.S. claimed that the subsidies granted decades ago caused adverse effects on the U.S. over the period 2001 to 2006. Second, the case involved partial privatization.

It was held that there is no requirement that subsidies be present, or that a "present" benefit exist or that a "benefit continues" during the reference period. Both the Panel and AB interpreted Articles 1, 5, and 6 of the SCM Agreement to not require a complaining party to demonstrate the existence of a "present" benefit or a "benefit that continues" during the reference period.[815] There may be a time lag between the provision of subsidies and their effects, as explained by the Appellate Body in *US – Upland Cotton*.[816] "Under certain circumstances, a past subsidy that no longer exists may be found to cause or have caused adverse effects that continue to be present during the reference period."[817] "Effects of a subsidy will ordinarily dissipate over time and will end at some point after the subsidy has expired."[818]

[814] It is hard to determine "uneconomic investment" ex ante as opposed to ex post, and so as to the quantification.
[815] AB Report, *European Communities — Measures Affecting Trade in Large Civil Aircraft (EC and Certain Member States — Large Civil Aircraft)*, WT/DS316/AB/R, adopted 18 May 2011, paras. 691-3, and para. 712.
[816] *See* AB Report, *US – Upland Cotton*, WT/DS267/AB/R, adopted 3 March 2005, paras. 476, 482, and 484; AB Report, *EC and Certain Member States — Large Civil Aircraft*, WT/DS316/AB/R, adopted 18 May 2011, para. 712.
[817] AB Report, *EC and Certain Member States — Large Civil Aircraft*, WT/DS316/AB/R, para.712.
[818] AB Report, *EC and Certain Member States — Large Civil Aircraft*, WT/DS316/AB/R, para.713.

In the analysis of "present adverse effects of a subsidy", two aspects about "how the subsidy has been materialized and affected over time" shall be taken to account, i.e., one is the depreciation of the subsidy given that a subsidy has a finite life, and the other is the "intervening events" that may have occurred following its grant that may affect the projected value of the subsidy.[819]

Second, as for the question of whether the intervening events of "changed ownership" extinguish benefits or not, the AB indicated in *US–Countervailing Measures on Certain EC Products* that the findings of that dispute should be confined to the "very precise set of facts and circumstances", and emphasized that there is "no inflexible rule *requiring* that investigating authorities, in future cases, *automatically* determine that a 'benefit' derived from pre-privatization financial contributions expires following privatization at arm's length and for fair-market value".[820] In any event, the AB in *EC - Civil Aircraft* divided in three ways.

i) One position is that the presumption of extinction only applies to a full privatization, rather than partial privatizations or private-to-private sales.

ii) The second position is that, although the utility value of equipment derived from the subsidies is not extinguished after privatization, this is irrelevant once a fair market price is paid for the equipment or the assets of a company. It views that the presumption rule also applies to partial privatization and private-to-private sales. Nevertheless, this position noted the issue of a transfer of control to the new owners, by stating

"*The same firm may continue to make the same products with the same equipment…* The *utility value* of *equipment* acquired as a result of the financial contribution is not extinguished as a result of a privatization at arm's length and for fair market value. However… the utility value of such equipment to the newly privatized firm is legally *irrelevant* for purposes of determining the continued existence of a "benefit" under the *SCM Agreement*…the value of the benefit under the *SCM Agreement* is to be assessed using the marketplace as the basis for comparison. Therefore…*once a fair market price is paid for the equipment, or more broadly the assets of a company, their market value is redeemed, regardless of the utility value a firm may derive therefrom…* This Member considers the *rationale* underlying the Appellate Body's case law *on full privatization* in the context of Part V of the *SCM Agreement equally to apply in situations of partial privatization and private-to-private transactions and i*n the context of Part III of the *SCM Agreement*. This Member also notes that…an important question in this context *is to what extent*

[819] AB Report, *EC and Certain Member States — Large Civil Aircraft*, WT/DS316/AB/R, paras. 709-10.
[820] Appellate Body Report, *US – Countervailing Measures on Certain EC Products*, WT/DS212/AB/R, adopted 9 Dec. 2002, para. 127.

the partial privatization or private-to-private transactions *resulted in a transfer of control to* new owners who paid fair market value for shares in the company." (footnote omitted, emphasis added.)

iii) The third position is that in a sale of shares, regardless whether there is a transfer of control or not, the value of assets of the company, to which the shares attach, does not change at all, including the benefit of any subsidy granted, which continues to benefit the recipient, and doesn't extinguish.

"…I entertain no small measure of doubt that an acquisition of shares, concluded at arm's length and for fair market value, constitutes relevant circumstances warranting the conclusion that an extinction of benefit has taken place. A subsidy granted to a recipient company contributes to *the net asset value of* that company…*When shares change hands on an arm's-length basis and for fair market value, the buyer pays a price that, in the estimation of the buyer, places a proper value on the future earnings of the recipient. Those earnings derive from all the assets of the recipient, including the benefit of any subsidy paid to the recipient*…The central point is *that a sale of shares, whether or not it conveys control, transfers rights in the shares to a new owner. The assets of the company, to which the shares attach, do not change at all.* Nor could it be otherwise, because the buyer would then not acquire the full benefit of the bargain: the buyer would pay for an asset (the subsidy) that had in the very sales transaction been "extinguished"…*The changing price of listed securities reflects the different valuations that buyers and sellers place upon companies and their underlying assets.* However, *nothing about these trades extracts the value of any asset*, including the benefit of any subsidy granted. *That subsidy continues to benefit the recipient, even if the ownership of the recipient's shares changes from one day to another.*"[821] (footnote omitted, emphasis added.)[822]

In sum, the uncertainty continues in respect of whether benefits continue or not after partial privatization. It is not sure the factor "whether privatization at arm's length and for fair-market value" and the factor "whether there is a transfer of control" can play determinative roles.

In the context of Chinse SOEs, some privatizations are partial privatizations, and for the publicly-listed SOEs, control is still retained by the government. Accordingly, the benefits of the subsidies would not be extinguished under any of the three positions. However, as for the privatizations with a transfer of control, the uncertainty continues in respect of whether the benefits of the subsidies would be extinguished under the three positions. In addition, given that many mergers and

[821] AB Report, *EC and Certain Member States — Large Civil Aircraft*, WT/DS316/AB/R, paras.726.
[822] "Given that the Appellate Body in this case does not need to come to any final view on the issue of extinction in the context of a partial privatization or private-to-private sales, these matters do not require more definitive determination." AB Report, *EC and Certain Member States — Large Civil Aircraft*, paras. 730-2.

acquisitions occur among Chinese SOEs, questions may arise as to whether subsidies pass through to the new company where an SOE that has previously received subsidies is restructured and legally reorganized to form a new company. This question was answered in *EC–Large Civil Aircraft*, where it was found that changes to the corporate structure of the producer of Airbus LCA did not require a demonstration that subsidies provided to the Airbus Industrie consortium "passed through" to Airbus SAS, the current producer of Airbus LCA.[823] Hence, the analysis of subsidies prior to the restructuring and merger of SOEs is not affected by the restructuring and merger as long as the predecessor SOE and current SOE are not substantively different in economic reality.

Hence, as for the privatizations with a transfer of control, the uncertainty continues in respect of whether the benefits of the subsidies would be extinguished under the three positions. To that end, the legal problem remains that in cases of partial privatization of Chinese SOEs when there is a transfer of control, it is not clear whether subsidies received prior to privatization can still be subject to the SCM Agreement given that it is not clear based on current jurisprudence whether the legal element of "benefit" as required under the SCM Agreement can be established or not.

(4) The Element of "Benchmark Prices"

Article 14 (d) of the SCM Agreement provides that:

> "The provision of goods or services or purchase of goods by a government shall not be considered as conferring a benefit unless the provision is made for less than adequate remuneration, or the purchase is made for more than adequate remuneration. The adequacy of remuneration shall be determined in relation to prevailing market conditions for the good or service in question in the country of provision or purchase (including price, quality, availability, marketability, transportation and other conditions of purchase or sale)."

Article 15 (b) of China's Accession Protocol provides that deviations can be applied in price comparability in determining subsidies if there are special difficulties in application of general rules. It allows choosing a different benchmark in identifying and measuring the subsidy benefit if

[823] "Finally, we do not consider that the relationship between the predecessor companies and Airbus SAS is one that can be characterized as a relationship between unrelated companies operating at 'arm's length'". *See* AB Report, *European Communities — Measures Affecting Trade in Large Civil Aircraft (EC and certain member States — Large Civil Aircraft)*, WT/DS316/AB/R, adopted 18 May 2011, paras. 691-3, 768 and 776.

market economy conditions are not prevailing or the possibility that prevailing terms and conditions in China may not always be available as appropriate benchmarks. This provision doesn't have an expiration date.[824]

Thus, in order to find whether there is a subsidy, it must be examined whether benefits are given to the recipients that are otherwise not available under the market conditions. A benchmark is needed for such comparison.[825] In cases of SOEs receiving advantages, the market in which SOEs operate may be distorted, particularly where SOEs are monopolists or dominate the market. How are the factors, for instance, that the state subsidizes the price of a raw material input, the state dominates the banking sector and sets the interest rates charged by SOBs, and the state's ability to set electricity prices, and prices of the right to use land in China, etc., relevant in finding that Chinese prices in general do not "permit a proper comparison"?[826]

The current standard for using an alternative benefit benchmark is relatively strict. The burden of proof is on the importing country to explain the reason for choosing a different benchmark.[827] First, the standard focuses on the outcome, i.e., whether the proposed benchmark is market-determined. In *US–Carbon Steel (India)*, it was held that the issue of finding a benchmark is whether the price is a market-determined price reflective of prevailing market conditions in the country of provision, rather than a function of the source of the price.[828]

Second, it was held that prices of goods provided by, for instance, SOEs must also be examined to determine whether they are market determined or not.[829] It was recognized that a government, in its role as a provider, for instance, through SOEs, may distort prices.[830] It was recognized that the more predominant a government's role in the market is, the more likely this role will result in the distortion of private prices.[831] Despite the above recognitions, however, it was held that Article

[824] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 15 (b) and (d).
[825] Article 1.1(b) and 14 of the SCM Agreement.
[826] Mark Wu, "The 'China, Inc.' Challenge to Global Trade Governance," 57 *Harvard International Law Journal* (May 13, 2016): 47.
[827] In anti-dumping cases, the burden of prove is on China.
[828] AB Report, *US – Carbon Steel (India)*, para. 4.154.
[829] AB Report, *US – Carbon Steel (India)*, para. 4.154.
[830] AB Report, *US – Softwood Lumber IV*, para. 100.
[831] AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, para. 444.

14(d) of the SCM Agreement "establishes no legal presumption that in-country prices from any particular source, including government-related prices other than the financial contribution at issue, can be discarded in a benchmark analysis."[832] It was held in *US Countervailing Measures (China)* that there is no per se rule that the fact that the government is the predominant supplier establishes that there is price distortion.[833] It means that the fact that SOEs are the predominant supplier does not per se establish there is price distortion.[834] "Evidence relating to government ownership of SOEs and their respective market shares does not, in and of itself, provide a sufficient basis for concluding that in-country prices are distorted."[835] Neither can the fact that the government is the predominant supplier of the relevant goods, exclude consideration of other factors.[836]

Finally, the analysis will vary depending upon the circumstances of the case, the characteristics of the market being examined, and the nature, quantity, and quality of the information.[837] Hence, the factors relating to the structure of the relevant market, whether the market is dominated by the state, the nature of the entities operating in that market, SOEs' respective market shares, whether systematic subsidies are associated with the market, whether there is price control, or prices set by SOEs, entry barriers, conditions of competition, behavior of SOEs, etc., are only deemed to be relevant factors, in finding, for instance, whether the government is influencing the pricing conduct of SOEs, rather than decisive factors.[838]

In sum, in cases of SOEs receiving advantages, the market in which SOEs operate may be distorted, particularly where SOEs are monopolists or dominate the market. The legal element of "benefit" is required in order to establish the existence of subsidies subject the SCM Agreement. A benchmark is necessary for the finding of a benefit for the purpose of comparison and proving that benefits are given to recipients that are otherwise not available under the market conditions. It is usually difficult to find the existence of benefits if the benchmark is the market where SOEs dominate. Although current rules allow choosing a different benchmark in identifying and

[832] AB Report, *US – Carbon Steel (India)*, para. 4.154; AB Report, *US – Countervailing Measures (China)*, para. 4.64.
[833] AB Report, *US – Countervailing Measures (China)*, WT/DS437/AB/R, para. 4.51.
[834] AB Report, *US – Countervailing Measures (China)*, WT/DS437/AB/R, para 4.52.
[835] AB Report, *US – Countervailing Measures (China)*, WT/DS437/AB/R, para. 4.62.
[836] AB Report, *US – Anti-Dumping and Countervailing Duties (China)*, para. 446.
[837] AB Report, *US – Countervailing Measures (China)*, WT/DS437/AB/R, para. 4.47.
[838] AB Report, *US – Countervailing Measures (China)*, WT/DS437/AB/R, para. 4.62.

measuring the benefit subject to certain conditions, the mere status of SOEs' dominance in one industry or market cannot automatically imply there is price distortion which warrants an alternative benchmark. Hence, the finding of "benefits" for the purpose of establishing a subsidy subject to the SCM Agreement would be difficult given that the mere fact that SOEs dominate in one market cannot warrant an alternative benchmark.

(5) The Element of "Specificity"

The above problems primarily cast challenges to whether the measure in question constitutes a subsidy. In addition, the SCM Agreement requires that an actionable subsidy must be specific, which can be enterprise specific, industry specific or regional specific.[839] Besides, in the situation of upstream subsidies in the context of Chinese SOEs, the requirement of "specificity" needs to be proved in situations where the SOEs in the upstream industry provide goods or services at lower prices or on favorable terms to one or a certain number of industries, rather than all industries. Furthermore, China's commitments in its accession to the WTO include a special rule of specificity in relation to SOEs,[840] i.e., subsidies provided to SOEs will be viewed as specific if SOEs are the predominant recipients of such subsidies or SOEs receive disproportionately large amounts of such subsidies.

In the context of China, however, it is hard to prove "specificity" either as "industry specific" or "enterprise specific". First, it is usually various (dominant) SOEs in many industries that receive financial advantages. In practice, policies adopted by the Chinese Government usually identify strategic industries and pillar industries and give instructions and guidelines to favor these industries, in which SOEs either dominate or prevail. However, the details of how this favoritism is implemented may be difficult to find. It is not clear, for example, whether the Chinese Government favors these industries through granting specific financial advantages, information about which is largely unavailable. Thus, the policies and guidelines that specify certain industries as favored industries cannot per se easily be used to establish there is an "industry specific" subsidy for the purpose of finding "specificity" in making subsidies subject to the SCM Agreement.

[839] Article 2 of the SCM Agreement.
[840] Para.10.2, Part I of the Protocol of China Accession to the WTO.

Second, the recipients of advantages are largely SOEs even if the conditions for receiving advantages are neutral in their face without specific targets. But this phenomenon is not easily caught by the special commitments made by China given that so far, there have been no WTO cases involving this provision made by China in its accession commitments. The reason for not fully utilizing the special rule might be the evidential difficulties in finding information showing that SOEs are predominant recipients of the subsidies at issue or SOEs receive disproportionately large amounts of such subsidies. The "specificity" rule focuses on the outcome or result of a subsidy, rather than the status of the recipients in markets. Thus, it is hard to prove "enterprise specific".

In sum, it is difficult to satisfy the legal element of "specificity" in cases of Chinese SOEs receiving advantages, given that information in this regard is scarce in terms of finding either "industry specific" or "enterprise specific".

(6) Summary of Section 4.2.1

In summary, this section examined the deficiencies of current WTO rules in regulating financial advantages granted to SOEs in five aspects. First, the problem of SOEs giving advantages to other SOEs is not sufficiently addressed by the current WTO rules either through the "private body" approach within the SCM Agreement, the "public body" approach within the SCM Agreement, or the behavior rules in the WTO, particularly the protocols regarding specific commitment made by China. Second, as for the problem of SOEs in the downstream industry which benefit from transactions with subsidized SOEs in the upstream industry, the various approaches, including the subject approach, the recipient approach, the "benefits pass-through" approach, or the approach of "price or income support" that are available within the current WTO rules, are all inadequate to address the problem. Third, as for the privatizations of SOEs with a transfer of control, the uncertainty continues in respect of whether the benefits of the subsidies would be extinguished, and it is not clear whether subsidies received prior to privatization can still be subject to the SCM Agreement. Fourth, in cases of SOEs receiving advantages, it is usually difficult to find the existence of benefits, which is one legal element in establishing the existence of a subsidy, if the

benchmark is the market where SOEs dominate, since current WTO jurisdiction holds that the mere status of SOEs' dominance in one industry or market cannot automatically imply there is price distortion which warrants an alternative benchmark. Finally, it is difficult to satisfy the legal element of "specificity" in cases of Chinese SOEs receiving advantages, given that information in this regard is scarce in terms of finding either "industry specific" or "enterprise specific".

4.2.2 Monopolies and Exclusive Rights Granted to SOEs

(1) Grants of Monopolies or Exclusive Rights

Current WTO rules allow governments to grant monopolies or exclusive rights. Even though WTO jurisprudence has found some grants of monopolies or exclusive rights to violate WTO trade rules in a couple of cases, and some members have challenged the grants of exclusive rights or monopolies through strategically utilizing WTO rules, these findings and efforts confront limitations. In the context of Chinese SOEs, the problem of vertical integrated monopolies or exclusive rights is severe, i.e., an integrated monopoly, such as i) one SOE or bloc SOEs benefit from vertical monopolies or exclusive rights to production, distribution, and exportation/importation in industries that have characteristics of network sharing and common connections, [841] and ii) integration among upstream, midstream, and downstream sectors, such as petrochemical SOEs integrated chemicals, energy and transportation businesses, and coal SOEs integrated energy and railway operations.

The section below will examine the deficiencies of current rules in prohibiting or limiting the grants of monopolies or exclusive rights, including monopolies, exclusive distribution rights, exclusive trading rights, and exclusive production rights. The next section will examine the legal inadequacy in regulating the behavior of SOEs that are granted such monopolies or exclusive rights, if these grants are permitted.

[841] Jiagui Chen, Research on the 30 Years of China's Stat-owned Enterprise Reform, eds. Zheng LV and Sujian Huang (China: Economy & Management Publishing House, 2008), 308-331.

a. Grants of Monopolies or Exclusive Rights Are Not Prohibited Within the WTO

Historically, grants of monopolies or exclusive rights have not been per se illegal under GATT/WTO rules.[842] In practice, the WTO acknowledges that members may organize their economies differently. Indeed, one author has concluded that the Uruguay Round negotiators foresaw four alternative economic structures besides the market-oriented model, i.e., the command economy structure, the transition economy, corporatism and the integrated conglomerate-led structure.[843]

The WTO rules literally allow grants of monopolies or exclusive rights. First, in respect of trade in goods, Article XVII allows member to maintain state trading, and to grant monopolies or exclusive rights, as reflected in the wording of Article XVII:1(a): "Each contracting party undertakes that *if it establishes or maintains a State enterprise…or grants to any enterprise, formally or in effect, exclusive or special privileges*, such enterprise shall…". Although Article XVII imposes some obligations, discussed below, in respect of state trading, as shown in Notes to Articles XI, XII, XIII, XIV and XVIII,[844] there is no question that it is permitted. Second, the grants of exclusive rights or monopolies to entities that do not fall within the definition of state trading enterprises under Article XVII are not covered by the WTO. For instance, Article XVII of the GATT is mainly about trading monopolies or exclusive rights, and hence, other monopolies or exclusive rights are not even discussed in GATT, such as production monopolies or exclusive rights. Third, monopolies or exclusive rights cannot be challenged under the SCM Agreement, which only applies to "financial contributions" or "income support or price support". Hence, it

[842] Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 157-161; General Agreement on Tariffs and Trade, Contracting Parties, "Report of the Committee on Legal and Institutional Framework", L/2281, 1964, paras. 9-10.

[843] Corporatism refers to "a system of social and political organization in which major [societal and interest groups] are integrated into the governmental system. Each functional group is granted a "deliberate representational monopoly within their respective categories in exchange for observing certain controls on the selection of leaders and articulation of demands and supports. Examples include labor or agricultural producers. Corporatism can be found in Latin America and parts of Europe. The integrated conglomerate-led structure can be found in East Asia, like Japan and South Korea. Each industrial conglomerate features cross-shareholding relationships that serve to integrate companies across multiple sectors. In addition, each has its own financing vehicle. The state works closely with conglomerates to drive economic policy. *See* Mark Wu, "The 'China, Inc.' Challenge to Global Trade Governance," 57 *Harvard International Law Journal* (May 13, 2016), 24-6.

[844] "Throughout Articles XI, XII, XIII, XIV and XVIII, the terms 'import restrictions' or 'export restrictions' include restrictions made effective through state-trading operations." *See* Ad Articles XI, XII, XIII, XIV and XVIII in the Annex of GATT.

doesn't cover advantages other than financial advantages. Lastly, in respect of trade in services, GATS Article VIII on monopolies and exclusive service suppliers, GATS Article XVI on market access, GATS Article XVII on national treatment, and Article 5 and Annex 2A of the Protocol of China's Accession to the WTO which allows China to maintain exclusive trading rights for a list of goods,[845] all presume the existence of monopolies or exclusive rights. For instance, GATS Article XVI:2(a) requires Members not to limit the number of service suppliers whether in the form of numerical quotas, monopolies, or exclusive service suppliers in sectors where market access commitments have been undertaken. It allows Members to have monopoly service suppliers in sectors where market access commitments have not been undertaken.

An example of the application of the rules is in *Korea–Restrictions on Imports of Beef*, where the U.S. claimed that the Livestock Products Marketing Organization (hereinafter LPMO), which was established by the Korean Government to exclusively administer the importation of beef, constituted an import monopoly controlled by domestic producers and was in itself a separate "import restriction" within the meaning of Article XI. In other words, the U.S. challenged the very existence of the import monopoly under Article XI and XVII in a sense that it constituted a barrier to trade. The GATT Panel concluded that the mere existence of an import monopoly cannot itself be in violation of the GATT, by stating that

> "the LPMO had been *granted exclusive privileges as the sole importer* of beef. As such, the LPMO had to comply with the provisions of the General Agreement applicable to state-trading enterprises, including those of Articles XI:1 and XVII…Article XI:1 proscribed the use of 'prohibitions or restrictions other than duties, taxes or other charges', including restrictions made effective through state-trading activities, *but Article XVII permitted the establishment or maintenance of state-trading enterprises*, including enterprises which had been granted exclusive or special privileges. *The mere existence of producer-controlled import monopolies could not be considered as a separate import restriction* inconsistent with the General Agreement...As the rules of the General Agreement *did not concern the organization or management of import monopolies* but only their operations and effects on trade, the Panel concluded that the existence of a producer-controlled monopoly *could not in itself be* in violation of the General Agreement."[846][emphasis added]

[845] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 5 and Annex 2.
[846] GATT Panel Report, *Republic of Korea – Restrictions on Imports of Beef – Complaint by the United States (Korea-Beef (US))*, L/6503, adopted 7 November 1989, BISD 36S/268, paras. 114-115. It can be inferred that it is the same with Article II:4, which applies to "a monopoly of the importation of any product described in the appropriate Schedule annexed to this Agreement".

b. WTO Limits on Monopolies or Exclusive Rights Grants

WTO jurisprudence has recognized limits on grants of exclusive rights or monopolies in some cases, depending on the types of monopolies or exclusive rights, including exploration rights, production rights/processing rights, distribution rights (wholesale or retail), import rights, and export rights.

a) Exclusive Distribution Rights Granted to SOEs

In respect of trade in goods, grants of exclusive distribution rights are largely allowed. In *Canada–Provincial Liquor Boards (EEC)*, all the disputes were about the business practices of the liquor boards which were granted exclusive rights to distribute imported or local alcoholic beverages across provincial and national borders, rather than the grants of such exclusive distribution rights.[847] Nevertheless, grants of exclusive *distribution* rights to SOEs may violate the national treatment obligation of the GATT. Article XVII of the GATT allows the existence of monopolies in respect of the right to trade (export or import), but it doesn't cover the right to distribute. So the grant of exclusive rights to distribute may violate Article III:4, which requires national treatment of imported goods. In *China Publications and Audiovisual Entertainment Products,* regarding imported reading materials, the Panel found that Chinese measures restricted distribution channels for certain imported reading materials by requiring their distribution to be conducted exclusively through subscription, and *by Chinese SOEs*, unlike for like domestic reading materials, whose distribution can be conducted by foreign-invested entities. The Panel found that the government granted exclusive distribution rights to SOEs and these measures were inconsistent with GATT Article III:4.[848]

However, the deficiency of the above approach in challenging exclusive distribution rights granted to SOEs through Article III (national treatment) lies in that, first, no violations can be found if the

[847] GATT Panel Report, *Canada – Provincial Liquor Boards (EEC)*, L/6304, adopted 22 March 1988, BISD 35S/37,
[848] Panel Report, *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products (China — Publications and Audiovisual Products)*, WT/DS363/R, adopted 12 August 2009; Appellate Body Report, *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products (China — Publications and Audiovisual Products)*, WT/DS363/AB/R, adopted 21 Dec. 2009.

domestic like products are also subject to exclusive distribution by SOEs. For instance, in the Chinese petroleum industry, imported crude oil can only be distributed wholesale by SOEs, even through POEs can import crude oil. However, domestic crude oil is also only distributable by SOEs. Hence, no differential treatment can be found between the domestic and imported goods. Second, exports of goods subject to exclusive distribution by SOEs may be thereby indirectly affected by the behavior relating to prices, quantities, terms of transactions for exports, of SOEs that have been granted exclusive distribution rights. However, such grants of exclusive distribution rights to SOEs affecting exports cannot be challenged under GATT Article III:4 given that no imported goods are involved. In addition, such grants of exclusive distribution rights to SOEs affecting exports is allowed in general under GATT Article XVII. Although GATT Article XI may be resorted to if such exclusive distribution rights can be argued to be equivalent to quantitative restrictions, the argument is not easy to pursue.

In respect of trade in services, given that the distribution services are involved, grants of exclusive rights to *distribution* of imported goods only to SOEs can be a violation of Article XVI of the market access obligation or Article XVII of the national treatment obligation under the GATS, but only if commitments have been made for the service at issue. In *China–Publications and Audiovisual Entertainment Products,* regarding distribution services, the U.S. challenged measures that permitted only two SOEs---China Film Distribution Company and Huaxia Film Distribution Company---to distribute imported films for theatrical release, and measures that restricted distribution channels for certain imported reading materials by requiring their distribution to be conducted exclusively by Chinese SOEs through subscription,[849] The Panel found that Chinese measures were inconsistent with GATS Article XVI (market access commitment) and XVII (national treatment).

This approach largely avoids the deficiency mentioned above in situations where imported goods and domestic goods are all distributed exclusively by SOEs. However, some distribution services of goods in strategic sectors or pillar industries are not subject to schedule commitments made by China. Given that claims regarding market access commitments or the national treatment

[849] Panel Report, *China — Publications and Audiovisual Products* WT/DS363/R, adopted 12 August 2009; AB Report, *China — Publications and Audiovisual Products,* WT/DS363/AB/R, adopted 21 Dec. 2009.

obligation under GATS need to establish that the respondent party has specific commitments made in this regard and given that the specific commitments are limited in terms of their scope and content, such as varying depending on different modes of supply, such claims are difficult to establish.

b) Exclusive Trading Rights to Export or Import Granted to SOEs

In respect of trade in goods, exclusive rights of import or export granted to SOEs are disciplined in some cases through individual Member's accession protocol commitments to eliminate such exclusive rights and commitments to grant trading rights to all eligible entities on a national treatment basis. China has undertaken such commitments in its accession protocol. So China would violate its specific commitment to eliminate such exclusive rights by granting such exclusive rights to SOEs. In *China Publications and Audiovisual Entertainment Products*, China granted exclusive importation rights only to SOEs, rather than foreign invested enterprises, regarding imported reading materials, audiovisual home entertainment products, sound recordings, and films.[850] As for imported films for theatrical release, the only designated or approved importer is the China Film Import and Export Corporation, which is a Chinese SOE. For other finished audiovisual products, such as finished audiovisual home entertainment products, finished sound recordings, there was only one SOE—the China National Publications Import and Export (Group) Corporation—that has been approved to import finished audiovisual products.

Those SOEs in question enjoyed exclusive importation rights of respective goods. The U.S. targeted those exclusive rights. It was held by the panel and upheld by the AB that among many measures, those measures mentioned above were inconsistent with Articles 5.1 (obligation to grant the right to import) and 5.2 (obligation to grant the right on a national treatment basis) of Part I of the Protocol of Accession.[851] China violated the obligation to grant the import right to all enterprises and the obligation to grant the import right in a non-discriminatory way.

[850] AB Report, *China — Publications and Audiovisual Products*, WT/DS363/AB/R, para. 6.
[851] China also violated its obligations under the provisions of paragraph 1.2 of Part I of the Protocol of Accession (to the extent that it incorporates commitments in paragraphs 83 (obligation to grant import right) and 84 (discriminatory grants or discretionary grants) of the Report of the Working Party on the Accession of China). WTO, Report of the Working Party on the Accession of China, WT/MIN(01)/3, Nov. 10, 2001, para. 84(b).

The implementation of the AB report has not been satisfying in that the grants of exclusive rights have not been withdrawn. Instead, China agreed to raise its quota of foreign studio films by seventy percent.[852] This result indicates that disciplining grants of exclusive rights through case law may be limited when parties are willing to compromise based on their own interests, rather than strictly adhere to WTO rules.

China has undertaken commitments in its accession protocol to eliminate exclusive rights to export. So, it is a violation of its specific commitment to grant exclusive rights to export to SOEs. The *China-Rare Earths* case concerned export limits on rare earths, which are important inputs of some electronic consumer products. Demand for rare earths has grown rapidly over the past decade. China is the major supplier of rare earths. China imposed certain restrictions on the right of enterprises to export rare earths and molybdenum. The entities that received the right to export are almost all SOEs.[853] The AB found that China has violated its commitment in its Accession Protocol to eliminate trading restrictions, particularly Article 5.1 and 5.2. Later China ceased issuing exclusive trading rights in this area.

However, the means of disciplining grants of monopolies or exclusive rights through individual commitments upon their accessions to the WTO have limitations given that individual commitments are limited to the individual nation, such as China. Hence, these rules are without a universal application.

On the other hand, as to the problem of granting privileges to STEs, some WTO members have challenged grants of excusive trading rights in combination with privileges on the grounds that they will inevitably lead to some behavior inconsistent with the GATT, but their arguments were rejected. In *Canada-Wheat Export and Grain Imports*, the U.S. developed a new approach of challenging the existence of exclusive trading rights in combination with other advantages as a whole under GATT Article XVII in a sense that the combination of these elements together in

[852] Matthew Garrahan, "China Eases Restrictions on Hollywood Films," *Fin. Times*, Feb. 19, 2012. http://www.ft.com/intl/cms/s/0/d24696e6-5abd-11e1-b056-00144feabdc0.html#axzz42ENRRTec.
[853] Appellate Body Report, *China — Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum (China- Rare Earths)*, WT/DS431/AB/R, adopted 7 August 2014; My findings about the nature of these entities.

totality will inevitably lead to a violation of the GATT, for instance, leading to some behavior, which is inconsistent with the provisions of GATT Article XVII:1. Hence, in terms of remedies, the only way to prevent such GATT-inconsistent behavior is to remove the monopolies or other advantages granted to the entity at issue (so that the totality is lost). This put the grants of exclusive trading rights and other advantages per se under challenge implicitly. The logic behind the argument goes like this: if A is consistent with the WTO rules, and if B is consistent with the WTO rules, but the combination of A and B will inevitably/necessarily lead to C, which is prohibited under the WTO, then the combination of A and B is not consistent with the WTO rules. Ultimately, it requires the removal of A or B. In addition, this approach can save the complaining party from engaging in case-by-case investigations, and the rules can be applied in future cases. In theory, C mentioned above could be any rule in the WTO, for instance, the Anti-Dumping Agreement, or behavior disciplines in GATT Article XVII.[854]

The inadequacy of the U.S. approach can be illustrated. First, the Panel and AB implicitly recognized Canada's argument in this regard, pointing out that the strategy of implicitly and indirectly challenging the grants of exclusive rights and other advantages per se, which are allowed in general under the WTO, is not permitted. Second, within the WTO, it is hard to find a violation of a provision, to which the combination of exclusive rights and other advantages are alleged to inevitably lead. The claim will be largely dependent on the meaning of another provision that the combination of exclusive rights and other advantages are alleged to inevitably lead to.

c) Service Monopolies Granted to SOEs

In the area of trade in services, grants of monopolies to SOEs may violate market access commitments in GATS. In *China-Electronic Payment Services*, a monopoly granted to China UnionPay (SOE) in respect of services for payment card transactions denominated and paid in RMB in China, the Panel found that China violated XVI:2(a) of GATS on market access.[855] China

[854] This strategy can also be found in the EU law, where the C is about competition rules. The existence of monopolies will inevitably lead to abuse of the dominant positions, which is prohibited under the competition rules within the EU rules. Hence, the grants of monopolies in this regard are challenged and can be prohibited.
[855] Panel Report, *China – Certain Measures Affecting Electronic Payment Services*, WT/DS413/R, paras. 7.508-7.636.

UnionPay is an SOE.[856] The Panel found that China maintained China UnionPay as a monopoly supplier for the clearing of certain types of RMB-denominated payment card transactions.[857] Article XVI:2(a) requires Members not to limit the number of service suppliers whether in the form of numerical quotas, monopolies, exclusive service suppliers in sectors where market access commitments have been undertaken. The Panel concluded that China acted inconsistently with its market access commitment under Article XVI:2(a) of the GATS by granting China UnionPay a monopoly for the clearing of these types of RMB payment card transactions.[858]

Such a result is possible only in respect of services subject to market access commitments. This is generally inadequate to control monopoly rights in services because many WTO Members have made only limited commitments under GATS.

d) Exclusive Production Rights Granted to SOEs

In the area of trade in goods, grant of exclusive production rights to SOEs is not disciplined by WTO rules. First, governments are allowed to grant exclusive production rights. Second, the very existence of SOEs is allowed under the WTO. Third, granting exclusive production rights to SOEs, is not disciplined, except to the extent that GATT Article XVII applies, but it only concerns trading rights or rights that "affect import or export". Thus, only if SOEs with exclusive production rights in fact affect export or import, may they be subject to Article XVII.

However, where exclusive production rights are granted to SOEs and there are some governmental measures relating to export/import in existence, it is the governmental measures relating to export/import that are subject to WTO disciplines, rather than the grants of exclusive production rights per se that are under challenge. In the absence of any explicit governmental measure relating to import/export, the mere existence of exclusive production rights granted to SOEs cannot be challenged. Even if it can be found that SOEs with exclusive production rights may affect export/import, such as the SOE in question also exports or imports in addition to production, it is

[856] Tangfei, "Who is the owner of UnionPay?", JRJ.COM, Oct. 1, 2013, http://opinion.jrj.com.cn/2013/10/01080115912728.shtml
[857] Article XVI (2) (a) of GATT.
[858] The panel found no inconsistency with China's national treatment commitments. *See* Panel Report, *China – Certain Measures Affecting Electronic Payment Services*, WT/DS413/R, paras. 7.508-7.636.

only the behavior of SOEs with exclusive rights that is subject to GATT Article XVII, rather than the grants of exclusive production rights, which are allowed under GATT Article XVII.

e) Other Privileges Granted to SOEs

In the areas of trade in services, grants of privileges may violate the national treatment obligation of GATS. In the case of *China–Electronic Payment Services,* China UnionPay was granted various privileges. China required that all ATMs, merchant card processing equipment and point-of-sale terminals in China to be capable of accepting payment cards bearing the "UnionPay" logo and post the "UnionPay" logo. In contrast, services suppliers of other Members had to negotiate for access to merchants. The Panel found that each of these requirements, including that all payment card processing devices must be compatible with China UnionPay's system, must use the China UnionPay's electronic funds transfer network rather than the foreign enterprises' electronic funds transfer network (e.g., Visa network or MasterCard network), and must bear the "UnionPay" logo, to be inconsistent with China's mode 1 and mode 3 national treatment obligations under Article XVII of the GATS. In the Panel's view, China modified the conditions of competition in favor of China UnionPay through these requirements and failed to provide national treatment to electronic payment services suppliers of other Members.[859]

Once again, the inadequacy of WTO rules in controlling grants of monopolies lies not only in the limited commitments made by WTO Members under GATS, but also the questionable implementation of dispute settlement decisions. In the implementation stage of *China – Electronic Payment Services,* China agreed to comply with the WTO's rulings by July 2013, but China has not yet taken the needed steps to authorize access by foreign suppliers in the market of credit card and processing companies that supply electronic payment services to banks and other businesses, despite the U.S.'s active pressure on China to comply with the WTO's rulings and the threat of taking further steps at the WTO.[860]

[859] Panel Report, *China – Certain Measures Affecting Electronic Payment Services*, WT/DS413/R, paras. 7.508-7.636.
[860] The U.S. Trade Representative, "2016 U.S.T.R. National Estimate Report on Foreign Trade Barriers," (2016), 90.

Conclusion of (1)

Grants of monopolies or exclusive rights are not disciplined adequately. WTO rules allow grants of monopolies and exclusive rights. Although some kinds of monopolies or exclusive rights have been challenged by parties in WTO dispute settlement proceedings, only some of the challenges succeeded while others failed. Those that succeeded typically involved claims of country-specific commitments, such as GATS market access commitments, or protocol commitments, but many countries have made only limited GATS commitments and have no protocol commitments. General WTO rules do not usually address the issue.

(2) Regulating the Behavior of SOEs with Monopolies or Exclusive Rights

Given the inadequacy of WTO rules in respect of granting monopolies and exclusive rights, it is necessary for completeness to explore whether WTO rules regulate the behavior of those SOEs that have been granted such monopolies or exclusive rights. Once again, it appears that WTO rules inadequately regulate such behavior. First, not all SOEs with monopolies or exclusive rights are subject to behavior regulations at all. Second, much anti-competitive behavior is not disciplined. Third, similar behavior is subject to different disciplines depending on which area of trade is concerned, or which market is concerned. For example, some behavior may be disciplined if it is conducted by SOEs in the area of trade in goods rather than in the area of trade in services, or vice versa.

This part will first examine the subject coverage of the current WTO rules. Then I proceed, based on the types of behavior of SOEs that have been granted monopolies or exclusive rights, to consider how the current WTO rules can to some degree discipline some behavior. I conclude, however, that such rules are yet inadequate.

a. Only Some SOEs are Disciplined

WTO rules are directed at its Members, rather than individuals or corporations. How to attribute behavior of SOEs with exclusive rights to WTO Members? International law usually uses rules of attribution, requiring some degree of connection between the state and the entity. However, under

some rules, such as GATT Article XVII and GATS Article VIII, WTO Members are responsible for the behavior of a monopoly, even if the government does nothing, as the rules impose an obligation on WTO Members to prevent certain behavior.[861]

This section will discuss the coverage of GATT Article XVII, i.e., whether it can be applicable to SOEs with exclusive state trading rights, SOEs with exclusive production and distribution rights, SOEs with exclusive natural resources exploitation rights, and SOEs with de facto monopolistic or oligopolistic status. Then, other rules, such as GATT Articles II, III and XI, will be examined to see whether they can be applicable SOEs with monopolies or exclusive rights.

Article XVII

With regard to the coverage of GATT Article XVII, it cannot cover all SOEs with monopolies or exclusive rights. The subject matter is defined in Article XVII:1(a) which provides that:

> "Each contracting party undertakes that if it establishes or maintains a State enterprise, wherever located, or grants to any enterprise, formally or in effect, exclusive or special privileges, such enterprise shall, in its purchases or sales involving either imports or exports…"

State Trading Rights

First, SOEs with *trading* monopolies or exclusive rights are subject to Article XVII by falling within the definition of state trading, given that trading monopolies or exclusive right can definitely influence import or export.[862] The Understanding on The Interpretation of Article XVII of the GATT 1994 provides a working definition of a "state trading enterprise" as follows:

> "Governmental and non-governmental enterprises, including marketing boards, which *have been granted exclusive or special rights or privileges*, including statutory or constitutional powers, in the exercise of which

[861] Understanding on the Interpretation of Article XVII of the General Agreement on Tariffs and Trade 1994; Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, paras. 6.39 and 6.43.

[862] In London Conference, the UK proposed to define STE by using a simple control criterion; any enterprise effectively controlled by the state should be considered an STE. However, it is only through latter case law that the definition is clarified, and judge retains substantial discretion to define what effectively amounts to control. *Report of the First Session of the London Preparatory Committee of the United Nations Conference on Trade and Employment*, U.N. Doc. E/PC/T/33, Oct.,1946 ("London Draft"), art. 31. It implies disciplines on SOEs. *See* Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 157-161.

they *influence* through their purchases or sales *the level or direction of imports or exports*."[863]

Production and Distribution Rights

Second, it remains ambiguous whether SOEs with monopolies or exclusive rights in production or distribution can be covered by Article XVII. In spite of the phrase "*exclusive or special rights or privileges*" in Article XVII:1(a), the provision limits its coverage by specifying that it applies to "purchases or sales involving either imports or exports". Moreover, the working definition in the 1994 Understanding on the Interpretation of Article XVII of GATT narrowed down the scope of entities that shall be reported to WTO, to only those enterprises i) granted exclusive or special rights or privileges, and ii) in the exercise of these rights they influence through their purchases or sales the level or direction of imports or exports.[864]

There are two approaches to argue that SOEs with exclusive production or distribution rights are covered by Article XVII:1. One approach is through aggressive interpretation of "in the exercise of which [exclusive or special rights or privileges] they *influence* through their purchases or sales *the level or direction of imports or exports".* It may be aggressively interpreted that production or distribution activities can indirectly affect imports or export, and hence the behavior of SOEs with exclusive production or distribution rights is covered by Article XVII. Also, the working definition in the Understanding cannot substantively alter the coverage of Article XVII:1(a) as the Understanding provides that "*Recognizing* that this Understanding *is without prejudice to the substantive disciplines* prescribed in Article XVII".[865] However, the approach of aggressive interpretation may encounter critics of judicial activism. Besides, while exclusive exploitation rights are mentioned in the Ad Interpretative Note to Article XVII:1(a), exclusive production or distribution rights are mentioned nowhere. Thus, it may be inferred that exclusive production and distribution rights are intentionally left untouched by the drafters of GATT.

[863] WTO Understanding on the Interpretation of Article XVII of the General Agreement on Tariffs and Trade 1994, para. 1.
[864] *Id.*
[865] *Id.*

The second approach is relying on the Illustrative List developed by the Working Party on State Trading Enterprises[866] in pursuance to its mandate provided in the Understanding of Article XVII for the purpose of facilitating Members compliance with notification requirement. GATT Article XVII:4(a) and paragraph 1 of the Understanding on Article XVII require that Members should notify their STEs and their operations to the Council for Trade in Goods. The Working Party on State Trading Enterprises reviews notifications. The format for such notifications is a standard questionnaire.[867]

With regard to which entity is subject to notification, paragraph 1 of the Understanding of Article XVII has the working definition of STEs as (i) a governmental or non-governmental entity, including marketing boards; (ii) the granting to the enterprise of exclusive or special rights or privileges; and (iii) a resulting influence, through the enterprise's purchases or sales, on the level or direction of imports or exports."[868] The Working Party completed its mandate to develop an Illustrative List of the kinds of relationships between governments and state trading enterprises and the kinds of activities engaged in by these enterprises, which may be relevant for the purposes of Article XVII.[869] The Illustrative List is not intended to be exhaustive. The Illustrative List tried to clarify what constituted an exclusive or special right or privilege in the sense of Article XVII and the Understanding.[870] Despite differing positions about whether certain activities should be included in the illustrative list,[871] the Illustrative List tried to make efforts to reach any SOEs and to know more about their relationship with their governments.

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[866] It was established by the Council for Trade in Goods at its meeting of 20 Feb. 1995, pursuant to paragraph 5 of the Understanding on the Interpretation of Article XVII of the General Agreement on Tariffs and Trade 1994. The mandate of the Working Party is set out in paragraph 5 of the Understanding.

[867] The 1960 questionnaire was revised in 1998 and then again in 2003 when the frequency of notifications was made less burdensome. *See 1960 Questionnaire on State Trading*, BISD 9S/184-185, adopted 24 May 1960; WTO Working Party on State Trading Enterprises, *Questionnaire on State Trading*, G/STR/3, adopted 7 April 1998; WTO Working Party on State Trading Enterprises, *Questionnaire on State Trading*, (G/STR/3/Rev.1), adopted on 14 November 2003; Report (2002) of the Working Party on State Trading Enterprises, G/L/591, adopted 21 November 2002.

[868] WTO Understanding on the Interpretation of Article XVII of the GATT 1994.

[869] *Report (1995) of the Working Party on State Trading Enterprises*, G/L/35, adopted 14 November 1995; Working Party on State Trading Enterprises, *Illustrative List of Relationships Between Governments and State Trading Enterprises and the Kinds of Activities Engaged in by These Enterprises*, G/STR/4, 30 July 1999.

[870] Report (1997) of the Working Party on State Trading Enterprises, G/L/198, adopted 17 November 1997.

[871] Report (1998) of the Working Party on State Trading Enterprises, G/L/281, adopted 26 November 1998; Working Party on State Trading Enterprises, *Proposal from the U.S.: Draft Illustrative List of The Relationships between Governments and State Trading Enterprises and State Trading Activities*, G/STR/W/32, 1 October 1996; Working Party on State Trading Enterprises, *Proposal from New Zealand DRAFT ILLUSTRATIVE LIST of The Relationships between Governments and State Trading Enterprises and State Trading Activities*, G/STR/W/31, 17 September 1996.

The list does seem to cover certain SOEs that have been granted exclusive rights to production, distribution and trade. For example, one type of entity listed is "a government-owned or partially owned enterprise" meeting the following conditions:

> "the enterprise purchases or sells a given product or group of products, either directly or indirectly through third parties under contract or transfer of right; *and* one or more of the following applies:
>
> (i) the enterprise is specially authorized or mandated by the government to do one or more of the following: control and/or conduct import or export operations; distribute imports; control domestic production, processing, or distribution.
>
> (ii) all or part of the enterprise's activities are supported by government in one or more of the following ways, and the support afforded is specific or more favorable to the enterprise and not generally available to other entities, or is not warranted by purely commercial considerations: budget allocations; interest rate/tax concessions; guarantees (e.g. for loans or against business failure); revenue from the collection of tariffs; preferential access to foreign exchange; any off-budget support or assistance." [872]

Regarding activities engaged in by STEs, the list also refers to activities that can be related to trade *in an indirect way*.[873] The List also outlines activities that were included in some notifications previously, such as "(i) Authorizes or manages *domestic production and/or processing of domestic production*; (ii) Determines the purchase price and/or sales price of domestic production; (iii) Manages domestic *distribution of domestic production* and/or imports; (iv) Undertakes purchases and sales of domestic production based on predetermined floor and ceiling prices (intervention purchases/sales)", etc.[874]

However, the List does not represent a definition of what constitutes a state trading enterprise as provided in Article XVII and its Interpretative Notes or the working definition contained in the

[872] Working Party on State Trading Enterprises, *Illustrative List of Relationships Between Governments and State Trading Enterprises and the Kinds of Activities Engaged in by These Enterprises*, G/STR/4, 30 July 1999.
[873] Such activities include (a) Controls or conducts imports or exports; (b) Administers multilaterally or bilaterally agreed quotas, tariff quotas or other restraint arrangements, or other import or export regulations; (c) Issues licenses/permits for importation or exportation; (d) Determines domestic sales prices of imports; and (e) Enforces the statutory requirements of an agricultural marketing scheme and/or stabilization arrangement. *See* Working Party on State Trading Enterprises, *Illustrative List of Relationships Between Governments and State Trading Enterprises and the Kinds of Activities Engaged in by These Enterprises*, G/STR/4, 30 July 1999.
[874] Working Party on State Trading Enterprises, *Illustrative List of Relationships Between Governments and State Trading Enterprises and the Kinds of Activities Engaged in by These Enterprises*, G/STR/4, 30 July 1999.

Understanding.[875] Each member has discretion to determine whether an enterprise should be notified under Article XVII.

In sum, in light of inadequacy of the two approaches, it remains uncertain that whether SOEs that have been granted monopolies or exclusive production or distribution rights are covered by Article XVII's provisions regarding behavior regulations, given that it is a case-by-case analysis to examine whether imports or exports are affected or not.

Natural Resources Exploitation Rights

The third problem with respect to the coverage of Article XVII is that, SOEs with exclusive rights to exploit national natural resources may not be covered by Article XVII:1 (a). The Ad Interpretative Notes to Article XVII Paragraph 1 (a) provides that "…privileges granted for the exploitation of national natural resources but which do not empower the government to exercise control over the trading activities of the enterprise in question, do not constitute "exclusive or special privileges". Although theoretically and logically one can distinguish between granting exclusive exploitation rights to SOEs without control over the trading activities of these SOEs, and granting exploitation rights to SOEs with control over the trading activities of these SOEs, governments usually do not explicitly announce that they control the trading activities of SOEs. In reality, there might be certain informal control over the trading activities of these SOEs, particularly in the context of Chinese SOEs, which would be difficult to establish in a specific dispute.

Transparency Issues

Finally, it should be stressed that some de facto monopolistic or oligopolistic status enjoyed by SOEs may easily escape disciplines due to the lack of information. For instance, government assisted concentration and consolidation among SOEs, issuing non-exclusive production license/exploration permits and export/import licenses to SOEs can in fact result in SOEs enjoying monopolies or exclusive rights, in the following situations: i) Situation one: although POEs are not prohibited by law from entering the industry, in fact, no POEs exist in the industry; ii) Situation two: in fact, there are no POEs large enough that can be comparable to large SOEs, for example,

[875] *Id.*

there are only small and medium sized POEs in the steel industry. Hence, the SOEs are in dominant positions. It is not easy to find the grants of exclusive rights in fact. In the case of China *Publications and Audiovisual Entertainment Products*, the panel found that "the United States had not been able to demonstrate that China's regulations and rules established, either de jure or de facto, a duopoly that would prevent other enterprises from applying for, and receiving, a license to distribute imported films."[876] Hence, it is difficult finding evidence for claim of de facto exclusivity.

In summary, with regard to the coverage of Article XVII, only some SOEs are disciplined, including SOEs with trading monopolies or exclusive rights. But it is uncertain whether SOEs with monopolies or exclusive rights in production or distribution can be covered by Article XVII. SOEs with exclusive rights to exploit national natural resources may not be covered by Article XVII due to the difficulty of proving state control over trading activities of these SOEs.

Other GATT Articles

In respect of the coverage of GATT Articles II, III and XI, Article II (tariff concessions) only concerns a monopoly of the importation of a product subject to concessions. Article III is only applicable to governmental measures affecting imported goods. Given that article XI concerns import and export restrictions, exclusive rights to exploitation, production and distribution are not covered by Article XI unless they are equivalent to import or export restrictions. The aggressive argument that exclusive rights to exploitation, production and distribution are equivalent to an export or import restriction is hard to pursue.

b. Only Some Behavior is Regulated

Different behavior by STEs are subject to different provisions. Article XVII on STEs is only about discriminatory behavior and commercial considerations. Article XI can regulate import or export STE's behavior associated with quantitation restrictions since according to the Interpretative Note to Articles XI, which specifies that the terms "import restrictions" or "export restrictions" include

[876] Panel Report, *China — Publications and Audiovisual Products*, WT/DS363/R, adopted 12 August 2009; AB Report, *China — Publications and Audiovisual Products*, WT/DS363/AB/R, adopted 21 Dec. 2009.

restrictions made effective through state trading operations, Article II can regulate import STE's behavior regarding mark-ups associated with pricing.

This section will look at the various behavior of SOEs after receiving advantages. First, SOEs' discriminatory behavior, such as pricing differently, will be examined. Second, SOEs' decision making not based solely commercial considerations will be examined. Third, SOEs' anti-competitive behavior will be examined, such as taking advantage of monopolies or exclusive rights in non-reserved markets, abuses of their dominant positions, and engaging in cross-subsidization, collusion and exclusion behavior. Last, to take an example of one type of anti-competitive behavior conducted by SOEs, a case study of export restraints associated with SOEs will be analyzed.

a) Discriminatory Behavior

After receiving monopolies or exclusive rights, SOEs may engage in discriminatory behavior, such as pricing differently between the domestic market and export markets. In the case of discriminatory behavior of the sort dealt with by MFN, it might be addressed by current WTO rules through several channels. However, each encounters difficulty. GATS requires that the suppliers of monopoly services shall not violate the MFN obligation, and specific commitments regarding market access and national treatment. However, the purchasing behavior by SOEs with monopolies or exclusive rights is not disciplined. In addition, many WTO members made limited specific commitments in GATS on national treatment. In the GATT, the MFN obligation in Article XVII is applicable to SOEs with trading monopolies or exclusive rights.[877] However, an export STE can charge different prices for its sales of a product in different export markets, provided that such different prices are charged for commercial reasons.[878]

[877] Panel Reports, *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef* (*Korea –Various Measures on Beef)*, WT/DS161/R, WT/DS169/R, adopted 31 July 2000; Appellate Body Report, *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef* (*Korea –Various Measures on Beef*), WT/DS161/AB/R, WT/DS169/AB/R, adopted 11 Dec. 2000, para. 753; GATT Panel Report, *Canada – Administration of the Foreign Investment Review Act (Canada-FIRA)*, L/5504, adopted 7 Feb. 1984, BISD 30S/140, para. 5.16; Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.48.

[878] GATT, the Interpretative Note to Article XVII:1; Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.49.

As for the question of whether the national treatment obligation applies to SOEs with monopolies or exclusive rights, it raises some issues worthy of discussion. There are three approaches that could be taken to make the national treatment principle applicable. One approach is through interpreting Article XVII:1(a) as embracing NT. The text of Article XVII:1(a) requires Members to undertake that their STEs shall "act in a manner consistent with general principles of non-discriminatory treatment prescribed in this Agreement…". This reference to "general principles of non-discriminatory treatment", arguably can include MFN and NT, since the text doesn't explicitly exclude NT. However, it remains controversial whether the non-discrimination principle in Article XVII:1(a) refers only to MFN, or also refers to NT. One position argues that no NT obligation exists with respect to how state trading enterprises operate,[879] from examining the drafting history,[880] the interpretative note to Articles XI, XII, XIII, XIV and XVIII of GATT stating that the terms "import restrictions" or "export restrictions" include restrictions made effective through state trading operations,[881] and the absence of such specific reference to Article III.[882] Several GATT panel reports, such as *Belgian Family Allowances* and *Canada–Administration of the Foreign Investment Review Act,* adopted this position.[883]

The second approach is applying GATT Article III to address the discriminatory behavior against foreign producers by SOEs with monopolies or exclusive rights. However, it encounters the issue of whether the application of Article III is only available by a specific reference, or whether Article III can be applied directly. One argument is that Article XVII is a self-contained code of trade rules governing state trading enterprises, rendering other GATT provisions applicable only by

[879] John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd edition (Cambridge, MA: MIT Press, 1997), 326-27.
[880] William J. Davey, "Article XVII GATT: An Overview" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 17-36 (University of Michigan Press, 1998), 26.
[881] ANNEX I: Ad Articles XI, XII, XIII, XIV and XVIII Throughout Articles XI, XII, XIII, XIV and XVIII, the terms "import restrictions" or "export restrictions" include restrictions made effective through state-trading operations.
[882] Ernst-Ulrich Petersmann, "GATT Law on State Trading Enterprises: Critical Evaluation of Article XVII and Proposals for Reform," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 71-96 (University of Michigan Press, 1998), 75; GATT Panel Report, *Canada – Import, Distribution and Sale of Alcoholic Drinks by Canadian Provincial Marketing Agencies (Canada – Provincial Liquor Boards (EEC))*, L/6304, adopted 22 March 1988, BISD 35S/37.
[883] GATT Panel Report, *Belgian Family Allowances*, G/32, adopted 7 November 1952, BISD 1S/59, 60, para. 4; GATT Panel Report, *Canada – Administration of the Foreign Investment Review Act (Canada-FIRA)*, L/5504, adopted 7 Feb. 1984, BISD 30S/140, 163, para. 6.16.

reference.[884] Article II:4 and the Interpretative Note to Articles XI, XII, XIII, XIV and XVIII have specific references to STEs, while such reference is absent in Article III.[885] Nevertheless, the 1997 Annual Report of the WTO notes in respect of STEs: "There is nothing in the rules to suggest that autonomous behavior by enterprises in a manner contrary to the standards set out in the relevant WTO provisions would escape the scope of the obligations accepted by Members in those provisions."[886] Hence, Article XVII is not a self-contained code for STEs, and Article III could be applicable. Furthermore, Article III was applied by several panels in cases involving state-created monopolies. In the *EU-Canada Alcohol* case, the Panel avoided the issue of whether Article III can be applied directly by applying Articles II:4 and XI to the STEs involved.[887] However, the Panel saw "great force" in the argument that Article III:4 was also applicable to state-trading enterprises at least when the monopoly of the importation and the monopoly of the distribution in the domestic markets were combined, as was the case of the provincial liquor boards in Canada. The Panel thought this interpretation was confirmed by the wording of Article III:8(a).[888] In the *FIRA* case, the Panel applied Article III to the challenged measure directly and avoided the issue of whether NT is embedded in Article XVII:1, since once a violation of Article III:4 has been found, the panel though it was unnecessary to examine the issue of whether NT is embedded in Article XVII:1.[889]

Even if Article III is applicable, it is hard to view SOEs as the state for the purpose of applying Article III. Although in *the FIRA* case, it was found that the behavior of firms violated Article III:4, those firms were effectively required by the government of Canada to behave as they did in order to get a subsidy.[890] In the *Canadian Alcoholic Drinks* case, it was held that the practices of the

[884] Robert Howse, "State Trading Enterprises and Multilateral Trade Rules: The Canadian Experience," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1 (University of Michigan Press, 1998), 185 and 187.
[885] GATT Panel Report, *Canada – Provincial Liquor Boards (EEC)*, L/6304, adopted 22 March 1988, BISD 35S/37, paras. 4.26-7; Robert Howse, *id*., at 186-7.
[886] WTO, 1 *Annual Report 1997* (Geneva: WTO, 1997), 59.
[887] GATT Panel Report, *Canada – Provincial Liquor Boards (EEC)*, L/6304, adopted 22 March 1988, BISD 35S/37, paras. 4.26-7.
[888] GATT Panel Report, *Canada – Provincial Liquor Boards (EEC)*, L/6304, adopted 22 March 1988, BISD 35S/37, para. 4.26.
[889] GATT Panel Report, *Canada-FIRA*, L/5504, adopted 7 Feb. 1984, BISD 30S/140, para. 5.16.
[890] Robert Howse, "State Trading Enterprises and Multilateral Trade Rules: The Canadian Experience," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1 (University of Michigan Press, 1998), 186.

STEs at issue (Canadian liquor boards, which were found to be the government agencies) violated Articles III and XI.[891] STEs, particularly the marketing boards, are more likely to be deemed to be governmental agencies both by the international and domestic laws. However, it is not the same for the discriminatory behavior by SOEs with monopolies or exclusive rights. SOEs are not like the STEs in those cases discussed above such as the cases of *Canada FIRA* and *Canadian Alcoholic Drinks*. SOEs engaging in commercial activities are usually treated as commercial entities. In practice, it is wisely explicitly provided in domestic laws that these SOEs are commercial entities, not governmental agencies. As a result, it may be harder to subject the activities of such SOEs, if they are deemed to be commercial entities, to other provisions of GATT except for Article XVII.

A third approach is reframing the discriminatory behavior by SOEs with monopolies or exclusive rights as issues regarding market access, hence, subject to GATT Article II:4 or XI. Although the issue of applicability doesn't arise since Article II:4 has specific reference to STEs, one limitation is that Article II:4 only applies to products subject to commitments. In addition, Article II:4 only applies to import monopolies, by providing that when a government maintains a monopoly on importation of a product which has been bound, the operation of this monopoly should not "afford protection on the average in excess of the amount of protection provided for in that Schedule. In EU-Canada *Alcoholic Drinks,* the Panel held that Canada's import monopolies' discriminatory mark-ups were higher for imported products than those applied to domestic products and as a result were affording protection in excess of tariff bindings, and therefore a violation of Article II:4.[892] Given that Article XI has specific reference to STEs, [893] it can be applied directly. In the 1988 Panel report on *Japan-Trade in Semi-Conductors*, the Panel having already found the Japanese measures to be inconsistent with Article XI, did not consider it necessary to examine them in the light of Article XVII:1(c).[894] In *EU–Canada Liquor Board*, the Panel found Article XI applied to an STE, viewing the discriminatory listing requirements as analogous to quotas or quantitative restrictions on imports that were restrictions made effective through state-trading operations

[891] GATT Panel Report, *Canada – Provincial Liquor Boards (US),* DS17/R, adopted 18 Feb. 1992, BISD 39S/27, paras. 6.1-6.3.
[892] GATT Panel Report, Canada – Provincial Liquor Boards (EEC)), L/6304, adopted 22 March 1988, BISD 35S/37, paras. 4.15-9.
[893] Annex I: Ad Articles XI, XII, XIII, XIV and XVIII Throughout Articles XI, XII, XIII, XIV and XVIII, the terms "import restrictions" or "export restrictions" include restrictions made effective through state-trading operations.
[894] GATT Panel Report on *Japan — Trade in Semiconductors*, L/6309-35S/116, adopted on 4 May 1988, BISD 35S/116, paras.159-160.

contrary to Article XI:1.[895] However, not every claim can be reframed in this way. In addition, Article II cannot apply in cases of export monopolies and Article XI cannot apply to a situation where an export STE sells to export markets at a lower price than in the domestic market.[896]

There are limitations of only applying other provisions of GATT instead of applying Article XVII. STEs may lead to non-tariff trade barriers not being effectively covered by the general GATT disciplines of Articles II, III, and XI.[897] Once the violation of other provisions in GATT has been established, panels usually choose not to examine Article XVII due to judicial economy. The claims of GATT-inconsistent discrimination were always decided in favor of the complaining parties directly on the bases of Articles I, III, and XI rather than on Article XVII.[898] Avoiding discussion of Article XVII and its content (i.e., whether it includes NT), makes the relationship between Article XVII and non-discrimination principle more complex.

b) Decisions Not Based on Commercial Considerations

SOEs after receiving monopolies or exclusive rights from governments are more likely to follow decisions of governments, and are influenced by governments. Current rules are not sufficient to solve the problem. First, as for the non-commercial considerations based behavior of SOEs with monopolies or exclusive rights, only SOEs in trade in goods are disciplined in this regard, and no commercial considerations requirement exists in GATS.

Second, in respect of trade in goods, Article XVII:1 is not adequate to solve the problem of non-commercial considerations based behavior of SOE with monopolies or exclusive rights, due to the relationship between the solely commercial considerations obligation in Article XVII:1(b) and the non-discrimination principle in Article XVII:1(a). Disputes arise regarding whether the solely commercial considerations obligation in Article XVII:1(b) is a separate obligation from the non-

[895] GATT Panel Report, *Canada – Provincial Liquor Boards (EEC)*, L/6304, adopted 22 March 1988, BISD 35S/37, paras 4.24-5.
[896] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.47.
[897] Ernst-Ulrich Petersmann, "GATT Law on State Trading Enterprises: Critical Evaluation of Article XVII and Proposals for Reform," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 71-96 (University of Michigan Press, 1998), 85.
[898] *Id*., at 81-2.

discrimination obligation in Article XVII:1(a) or it is dependent on Article XVII:1 (a). The "dependent" relationship means that a violation of Article XVII needs violations of Article XVII:1 (a) and (b), and a violation of Article VII:1(b) cannot be established without a finding of a violation of Article XVII:1(a). Hence, "a discriminatory behavior based on non-commercial considerations" is required. The "independent" relationship means that Article XVII:1(b) is one example of Article XVII:1(a), and a finding of a violation of Article XVII:1(b) is sufficient in and of itself to the claim of a violation of Article XVII:1. The AB confirmed the "dependent" relationship.[899] It is also consistent with previous decisions.[900] To that end, behavior of SOEs with monopolies or exclusive rights based on non-commercial considerations without violating non-discrimination principle wouldn't be caught by Article XVII:1, given that the disciplines of Article XVII:1 are aimed at preventing certain types of discriminatory behavior.[901]

Third, sales maximization or selling at lower prices per se, rather than profits maximization doesn't necessarily violate the commercial considerations obligation according to current WTO jurisprudence. The U.S. in *Canada–Wheat Exports and Grain Imports* resorted to Article XVII:1(a) and (b) and argued that the STE in question, which had exclusive exporting rights would inevitably behave in a way inconsistent with non-discrimination principles and commercial considerations when utilizing their exclusive rights and other advantages. In respect of the commercial considerations obligation, however, the U.S. argument failed due to the AB's interpretation of the relationship between Article XVII:1(a) and (b), and its interpretation of the meaning of the term "commercial considerations". It was held that Articles XVII:1(a) and (b) are related to each other in that subparagraph (a) of Article XVII:1 sets out an obligation of non-discrimination and subparagraph (b) clarifies the scope of that obligation.[902]

Non-commercial considerations are distinct from anti-competitive behavior, which is not disciplined under Article XVII:1(b).[903] The U.S. made a distinction between the maximization of

[899] AB Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/AB/R, paras. 89-91, 94, 98, and 99.
[900] GATT Panel Report, *Canada – Administration of the Foreign Investment Review Act (FIRA)*, L/5504, adopted 7 Feb. 1984, BISD 30S/140, para. 5.16.
[901] AB Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/AB/R, para. 145.
[902] AB Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/AB/R, paras. 89, 99 and 100.
[903] Panel Report, *Canada — Measures Relating to Exports of Wheat and Treatment of Imported Grain (Canada—Wheat Exports and Grain Imports)*, WT/DS276/R, adopted 6 April 2004. The Appellate Body Report, *Canada —*

revenue/sale/quantity/scale and the maximization of profits, and asserted that the Canadian Wheat Board, which was granted exclusive export trading rights and other privileges, was motivated to maximize its sales or revenue, rather than profits, by selling wheat in some markets at lower prices than "commercial actors" could offer.[904] The Panel found that "*if an entity is driven to maximize sales 'at all cost' without regard for the returns, it may be considered as "non-commercial considerations"*.[905] The distinction may be drawn as follows. Profit-maximization means that revenues minus costs, and elements need to be considered include prices, sales and costs. Revenue-maximization only cares about sales regardless of costs. It can be inferred that "sales maximization" per se is not necessarily considered as "non-commercial considerations" unless there is no regard profits at all. Furthermore, in terms of the pricing, the United States asserts that revenue-maximizing firms will tend to make sales in greater volumes and at lower prices than would profit-maximizing firms.[906] The Panel noted that the "commercial considerations" requirement doesn't necessarily require profit maximization,[907] and lower prices or selling high quality at lower prices in order to increase market share or deter competitors is consistent with commercial considerations.[908] The Panel held that "if *an export STE were to sell into a particular market at a price that is lower than the best price available to it in that market, this might indicate that the STE in question is no*t charging the lower price for purely commercial reasons".[909] It may be inferred that selling at lower prices per se is not necessarily considered as "non-commercial considerations" unless lower than the best price available to it in that market.

In the context of Chinese SOEs, it is contested that Chinese SOEs are largely pursuing the goal of maximizing scale of their operations, sales and revenues, rather than profits. The tendency to expand scale of their operations and sales, regardless of profits and costs, continues after the end of the planned economy.[910] In addition, the promotions of managers of SOEs are associated with

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Measures Relating to Exports of Wheat and Treatment of Imported Grain (Canada—Wheat Exports and Grain Imports), WT/DS276/AB/R, adopted 30 August 2004.

[904] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.112.

[905] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.127.

[906] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.132.

[907] There exist private trading enterprises that do not maximize profits. *See* Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.134.

[908] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.144.

[909] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, paras. 6.129-130 and 6.133.

[910] Becky Chiu and Mervyn K. Lewis, *Reforming China's State-Owned Enterprises and Banks* (Edward Elgar Publishing, 2006), 61.

the size and scale of the SOE. Furthermore, grants of advantages enable SOEs to maximize sales at the expense of costs, leading to losses, which in return can warrant SOEs to receive more advantages from the government. However, despite that fact Chinese SOEs' considerations underlying decision-making are somewhat different from normal businessmen or commercial actors, it is hard to find evidence directly in respect of whether Chinese SOEs pursue sales maximization with no regard to profits and costs. Hence, it is hard to claim a violation of the commercial considerations obligation. Evidence is also needed in order to figure out whether the prices of Chinese SOEs who are pursuing expansion of scale, are the best available prices in that market, and whether there are foregone opportunities. To that end, it remains to be seen whether a similar claim may be sustained in the context of Chinese SOEs. It is subject to the discretion of the Panel in terms of dealing with the evidence and the AB will not interfere with a panel's exercise of its discretion.[911] Even if the claim of violating the commercial considerations obligation is established, discrimination between markets based on non-commercial consideration needs to be established further. In sum, factual difference may alter the conclusion in the context of Chinese SOEs.

c) Most Anti-Competitive Behavior is Undisciplined

SOEs after receiving monopolies or exclusive rights, are more likely to engage in anticompetitive activities than private profit-maximizing firms.[912] Their anticompetitive behavior includes taking advantage of monopolies or exclusive rights in non-reserved markets, such as upstream or downstream sectors, to increase market shares; abuses of their dominant positions; and engaging in cross-subsidization, collusion and exclusion behavior, such as export restraints, etc.

Partially disciplined

Some anticompetitive behavior is captured partially by current WTO rules. GATS Article XVIII (Additional Commitments) provides that Members may negotiate commitments with respect to measures affecting trade in services not subject to scheduling under Articles XVI or XVII. Special

[911] AB Report, *US—Carbon Steel (India)*, WT/DS436/AB/R, adopted Dec. 8, 2014, para. 142.
[912] David E.M. Sappington and Sidak, J. Gregory, "Competition Law for State-Owned Enterprises," 71(2) *Antitrust Law Journal* 479 (2003), 484.

GATS negotiations in basic telecommunications were concluded in 1997 with a "Reference Paper". Members can select any or all the provisions of the model Reference Paper to be included in their specific commitments. The model Reference Paper contains pro-competitive regulatory principles. For instance, section one is about competitive safeguards, mentioning prevention of anti-competitive practices in telecommunications with a list of examples of anti-competitive practices such as anti-competitive cross-subsidization. [913] WTO jurisprudence has interpreted anticompetitive behavior in the Reference Paper as including monopolization or abuses of a dominant position in ways that affect prices or supply; horizontal coordination of suppliers related to price-fixing and market-sharing agreements; [914] the removal of price competition by the government together with the setting of uniform prices by the major supplier if there are effects tantamount to those of a price-fixing cartel; cross-subsidization through government determination or approval of rates or rate structures;[915] and the allocation of market share between suppliers imposed by the authorities if there are effects tantamount to those of a market sharing arrangement between suppliers. [916] In addition, the exemption or immunity under national competition law cannot save a member from its obligations under the Reference Paper. A member would be obliged to revise or terminate the measures leading to anti-competitive behavior of exclusive suppliers.[917] However, such commitments are only binding in the telecommunications sector and only on Members who made such commitments.

Some anticompetitive behavior in respect of trade in goods, may be covered by GATT Article XI and II, in addition to non-discrimination. With respect to the problem of STEs limiting the quantity of import or export, Article XI can be resorted to given that the Interpretative Note to Article XI states that the terms 'import restrictions' or 'export restrictions' include restrictions made effective through state trading operations". With regard to the problem of STEs pricing very high for import, Article II can be resorted given that Article II:4 will be violated if a monopoly of importation of a

[913] *See* more about the model Reference Paper, in WTO Analytical Index: GATS, Article XVIII, https://www.wto.org/english/res_e/booksp_e/analytic_index_e/gats_03_e.htm#article18B
[914] Panel Report, *Mexico- Measures Affecting Telecommunications Services (Mexico — Telecoms),* WT/DS204/R, adopted 17 August 2000, paras. 7.234 and. 7.238.
[915] Panel Report, *Mexico — Telecoms*, WT/DS204/R, adopted 17 August 2000, para. 7.242.
[916] *See* more about the model Reference Paper, in WTO Analytical Index: GATS, Article XVIII, https://www.wto.org/english/res_e/booksp_e/analytic_index_e/gats_03_e.htm#article18B
[917] Panel Report, *Mexico — Telecoms*, WT/DS204/R, para. 7.242.

product subject to concessions prices high enough to exceed the tariff ceiling.[918] However, as for a product not subject to a concession, only notification is required according to Article XVII:4 (b), which provides that such import monopolies on products not subject to tariff concessions, shall notify the import mark-up on the product. With regard to a minimum import price, it was held to be a restriction on import falling within Article XI:1. In *EEC–Minimum Import Prices,* a minimum import price system as enforced by the additional security[919] has been considered by the GATT Panel to be a restriction "other than duties, taxes or other charges" within the meaning of Article XI:1.[920]

Most anticompetitive behavior of SOEs in respect of trade in services, may not be disciplined effectively. Article IX of GATS[921] addressing business practices of service suppliers other than monopolies and exclusive service suppliers, is worded broadly, and it notes that certain such practices may "restrain competition and thereby restrict trade in service".[922] However, Article IX of GATS is not applicable here given that it is applicable to certain business practices of service suppliers, other than those falling under Article VIII, which is about monopolies and exclusive suppliers. Furthermore, Article IX only obligates Members to consult. The WTO only obligates its Members to list products that are under price control, and there are no obligations for WTO Members to clarify their SOEs' pricing mechanisms, except for special commitments made by Members, such as Russia[923] and China. Article 6 of the China's Accession Protocol provides that

[918] An Interpretative Note clarifies that the provisions of paragraph 4 are to be applied in the light of Article 31 of the Havana Charter and explains that: "the term "import mark-up"... shall represent the margin by which the price charged by the import monopoly for the imported product exceeds the landed cost."

[919] A requirement that importers of tomato concentrates provide additional security to guarantee that the free-at-frontier price plus the customs duty payable would equal or exceed a determined minimum import price. The security would be forfeited in proportion to any quantities imported at a price lower than the minimum price.

[920] However, one member of the Panel noted that "importation of tomato concentrate at a price lower than the minimum price could still be carried out by importers who had an interest in doing so…The system operated in a way to levy an additional charge which raised the price of tomato concentrate imported at a price lower than the minimum price…(therefore) the minimum import price system was not being enforced in a manner which would qualify it as a restriction within the meaning of Article XI." GATT Panel Report on *EEC — Programmes of Minimum Import Prices, Licences and Surety Deposits for Certain Processed Fruits and Vegetables*, L/4687, adopted on 18 October 1978, BISD 25S/68, para. 4.9.

[921] Article IX of GATT.

[922] Jacques H.J. Bourgeois, "EC Rules on State Monopolies and Public Undertakings: Any Relevance for the WTO?" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 161-180 (University of Michigan Press, 1998), 174.

[923] Report of the Working Party on the Accession of the Russian Federation to the World Trade Organization, WT/ACC/RUS/70, WT/MIN(11)/2, 17 November 2011, para. 91.

such entities should be transparent about purchase procedures and export pricing mechanisms.[924] The Protocol of Accession requires China to "provide full information on the pricing mechanism of its state trading enterprises for exported goods."[925] However, even if there exists an obligation of transparency, it is largely related to export pricing, and is little related to domestic prices in cases of discrimination or cross-subsidization.

Not disciplined

Taking advantage of monopolies or exclusive rights in non-reserved markets and abuses of dominant positions are not disciplined. Article XVII:1(b) concerns behavior based on non-commercial considerations, rather than anticompetitive behavior or unfair competition. Some commercial considerations may lead to anti-competitive behavior. For instance, "in some circumstances, selling into one market at a price that is intended to deter other exporters from contesting that market may be commercial behavior, even if it may also be anti-competitive."[926] In *Canada–Wheat Exports and Grain Imports*, the U.S. wanted some behavior code such as anti-competitive disciplines on STEs, and argued that a STE shall not make use of special and exclusive privileges granted to it to the disadvantage of commercial actors.[927] The Panel concluded that the requirement that STEs make purchases or sales solely in accordance with commercial considerations must imply that they should seek to purchase or sell on terms, which are economically advantageous for themselves.[928] STEs with exclusive or special privileges are not prevented from gaining a competitive advantage by making use of these privileges, and may put their competitors at a competitive disadvantage.[929] The AB found in that case that Article XVII:1(b) does not impose comprehensive competition-law-type obligations on STEs.[930] In addition, such STEs are not required to make sales solely in accordance with "fair" commercial considerations.[931] The Panel also found that the second clause of Article XVII:1(b) of the GATT is not for the

[924] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 6 (state trading).
[925] WTO, Protocol on the Accession of the People's Republic of China, WT/L/432, 23 Nov. 2001, art. 6.
[926] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.81.
[927] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.74.
[928] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.87.
[929] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.100.
[930] AB Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/AB/R, paras. 145 and 151; Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, paras. 6.127, 6.129, 6.130, and 6.133.
[931] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, para. 6.101.

protection of STEs' competitors, i.e., it is not a protection of fair competition. STEs are not required to give regard to their competitors, nor to care about fair competition.[932]

Cross-subsidization by SOEs is not regulated by GATT in respect of trade in goods. Article VIII of GATS, which limits cross-subsidization, is only applicable to trade in services. Hence, using the monopoly rent derived from advantages from the government for one of an SOE's businesses to subsidize another business of the SOE, through undercutting prices or pricing below cost in non-monopoly businesses (non-reserved markets) is not disciplined in respect of trade in goods.

Collusion and exclusion behavior among giant SOEs who enjoy monopolies or exclusive rights may not be disciplined effectively by the current WTO rules. For instance, competition among SOEs groups might be reduced due to cooperation or conspiracy among bloc SOEs. Bloc SOEs may agree to limit output, reduce exports and increase export prices, and so on. The example of export restraints can be illustrated as follows. After receiving advantages and gaining dominant positions in markets, SOEs become capable of engaging in certain behavior, such as export restraints.

A Case Study: The Situation of Export Restraints

One particular form of anti-competitive behavior involves export restraints, which are anti-competitive. The problem is where there are no explicit export restraint measures issued by the government, export restraints may be effectively implemented by SOEs, which are the dominant players in the upstream industry.[933] Current rules are not adequate to address this problem in the following aspects.[934]

[932] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R, paras. 6.65, 6.68 and footnote 183.

[933] For instance, in *China - Rare Earths*, the Chinese government's measures regarding export duties, export quotas and restricting the right to export were found inconsistent with its WTO commitments. After the dispute, China removed export duties, export quotas and the restriction on trading rights of enterprises. However, after the litigation, China adopted the strategy of consolidating the rare earths industry into 6 giant SOEs. Each SOE has an exclusive jurisdiction over its district. The whole rare earths market in China is divided under the control of the six giant SOEs. The 6 SOEs have exclusive rights to produce rare earths. They may apply export restraints by themselves. *See Implementation of Adopted Reports* of WT/DS431/AB/R, the DSB Meeting, 20 May 2015. https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds431_e.htm

[934] The discussion here is primarily from the international perspective. From an anti-trust law perspective/competition law perspective, such as in the domestic market of the U.S., export restraints applied by SOEs may be subject to the U.S. competition law. SOEs, however, may raise defense of state doctrine/state immunity in that they are compelled by the government and hence are exempted from being sued in domestic U.S. court.

First, Article XVII of GATT is unlikely to reach these situations where there is conspiracy and cooperation among bloc SOEs to restraint exports given that it can be argued to be commercially motivated and hence consistent with the obligation of commercial based considerations within Article XVII:1(b), even if SOEs here in question can fall within the coverage of GATT Article XVII to the extent that SOEs indirectly affect exportation. This is because export restraints by SOE blocs are anti-competitive behavior rather than behavior not based on commercial considerations.

Second, in light of the terms "export restrictions" in Article XI including restrictions made effective through state trading operations,[935] combining Articles XVII and XI is not sufficient to address the problem. It is the market dominance that SOEs gained through advantages from governments that make these dominant SOEs able to implement export restraints by themselves. There are various advantages that may give arise to SOEs' dominance in a market. One is monopolies and exclusive rights, the other is regulatory advantages. Article XI is not applicable unless it can be demonstrated that the entities in question are state trading operations.

Third, Article XI alone is not likely to regulate the problem. Quantitative restrictions and a minimum export price can be held to be restrictions on exports failing within Article XI:1, such as in *Japan–Trade in Semiconductors*, where it was held that like a minimum import price constitutes a restriction within Article XI:1, a minimum export price also constitutes a restriction within Article XI:1.[936] Similar rulings regarding a minimum export price can be found in *China–Raw Materials*, where the Panel found that a minimum export price requirement is a quantitative restriction on trade prohibited by Article XI:1, because this requirement to export at a coordinated minimum export price by its very nature has a limiting or restricting effect on trade. [937] However, it is difficult to attribute SOEs' behavior to the government for the purpose of applying Article XI on elimination of export restrictions except for duties. Article XI:1 has a wide application to "import and export restrictions or prohibitions made effective through quotas, import or export

[935] GATT Interpretative Note to Article XI.
[936] GATT Panel Report on *Japan — Trade in Semiconductors*, (L/6309 - 35S/116), adopted on 4 May 1988, paras. 104, 105
[937] Panel Report, *China — Measures Related to the Exportation of Various Raw Materials (China — Raw Materials)*, WT/DS394/R, WT/DS395/R, WT/DS398/R, adopted 5 July 2011, paras. 7.1081-2.

licenses or *other measures*,"[938] i.e., referring more broadly to "measures" rather than referring to "laws or regulations".[939] Nevertheless, attribution is needed so that the behavior in question can be attributed to the government. In *China–Raw Materials*, the Panel found that various measures involving the China Chamber of Commerce of Metals, Minerals and Chemicals Importers and Exporters (CCCMC), who administered the export price, *were attributable to China*, because China acknowledged that *it delegated authority to the CCCMC to* coordinate export prices.[940] Also the CCCMC's charter directed it to set and coordinate export prices for all branches under its authority, including the raw materials at issue in that dispute.[941] In that case, *enterprises that deviated from coordinated export prices, were subject to* the imposition of penalties, either on the exporting enterprises or on export licensing entities that issued licenses to them.[942] In the case of SOEs, evidence needs to be found so that the behavior of SOEs conducting minimum export/import price or quantitative restrictions can be attributed to the government.

Fourth, most literature has talked about general export restraints imposed on all market participants in the industry at issue, i.e., situations where a government restricts the exportation of an essential input product for a domestic industry, and both the upstream industry and the downstream industry are dominated by POEs. There are three issues raised at the WTO in respect of export restraints imposed by governments, i.e., i) whether export restraints can be deemed to be "a financial contribution" within the meaning of Article 1.1 (a)(1)(iv) of the SCM Agreement; ii) whether export restraints can be deemed "any form of income or price support" within the SCM Agreement; and iii) whether export restraints can be challenged through the Anti-Dumping Agreement.

In respect of the discussion of whether export restraints can be deemed to be "a financial contribution" to the extent that the government *"entrust or directs"* a private body to provide goods at lower prices to the domestic market within the meaning of Article 1.1 (a)(1)(iv) of the SCM Agreement, This approach is discussed in *US–Export Restraints (Softwood I)*, where Canada restricted the exportation of logs, an essential input into the production of lumber, resulting in

[938] Panel Report, *China — Raw Materials*, para. 7.1072
[939] Panel Report, *China — Raw Materials*, para. 7.1073
[940] Panel Report, *China — Raw Materials*, para. 7.1005.
[941] Panel Report, *China — Raw Materials*, para. 7.1026.
[942] Panel Report, *China — Raw Materials*, para. 7.1064.

increasing the domestic supply of logs, and thus, lowering their price to domestic purchasers.[943] A "benefit" is present. The U.S. insisted on the "effects approach", which only focuses on effects of the governmental action, views the government has implicitly *directed* a private body to supply goods to the domestic industry, in that if the sellers of logs cannot export them they have no choice but to sell them domestically, it is functional equivalent to "government had ordered the domestic producers to do so".[944] The Panel rejected the U.S.'s effect approach, and instead, focused on the nature of government action, and hence, held that export restrictions cannot constitute a subsidy to a downstream industry, based on the following reasons: the fact that there is no government's direction or entrustment to POEs in cases of export restraints. [945] The AB in *US-DRAM* stated that "government's entrustment or direction" cannot be inadvertent or *a mere by-product of governmental regulation*."[946] Export restraints are governmental regulation, the mere by-product of which is that more goods under the export restraints are sold in the domestic market. The structure of the SCM Agreement is only to discipline actions listed explicitly, rather than non-listed actions with equivalent effects, such as governmental regulations.[947] The Panel notes that "the function of the fourth subparagraph [art. 1.1(a)(1)(iv) of the SCM Agreement] is not to encompass forms of action other than those provided in subparagraphs (i) to (iii)…but rather to avoid circumvention of those subparagraphs by a government simply acting through a private body or through a funding mechanism". The AB in *US-DRAM* agreed in this regard.[948]

In respect of the discussion in the literature as to whether export restraints can be deemed "any form of income or price support" within the SCM Agreement,[949] Article 1.1(a)(2) of the SCM Agreement provides that "a subsidy shall be deemed to exist if there is any form of income or price support in the sense of Article XVI of GATT 1994". The relevant text in GATT Article XVI

[943] Panel Report, *United States—Measures Treating Export Restraints as Subsidies (US – Export Restraints) (Softwood I)*, WT/DS194/R, adopted 29 June, 2001, para. 2.5.
[944] In contrast, Canada views that "a producer faced with an export restraint would have multiple options, which might include selling to domestic purchasers, for example, vertically integrating or switching to another business altogether." Panel Report, *US – Export Restraints (Softwood I)*, WT/DS194/R, adopted 29 June, 2001, paras. 8.22-8.23.
[945] Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), 111-22.
[946] AB Report, *US — Countervailing Duty Investigation on DRAMs*, WT/DS296/AB/R, adopted on 27 June 2005. para. 114.
[947] *See* Panel Report, *US – Export Restraints (Softwood I)*, WT/DS194/R, adopted 29 June 2001, paras. 8.15-76.
[948] AB Report, *US — Countervailing Duty Investigation on DRAMs*, WT/DS296/AB/R, para. 112.
[949] Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), 123-5.

provides that "If any contracting party grants or maintains any subsidy, including any form of income or price support, which operates directly or indirectly *to increase exports of any* product from, or to *reduce imports* of any product into," (emphasis added). Some scholars argued that the phrase "income or price support" can be a provision to cover situations that cannot fall within the scope of "financial contribution".[950] However, one difficulty in cases of export restraints is that they operate to decrease exports, rather than increasing exports, contrary to the requirement of "operates directly or indirectly to increase exports of any product…" in GATT Article XVI. The other difficulty is still the distinction between border measures and financial assistance. The *US–Export Restraints* Panel noted that "the support of the price of a commodity by imposing high tariffs on imports would not constitute a subsidy within the meaning of Article 1."[951] Hence, "regulatory mechanisms involving border measures, such as tariffs and export restraints, although producing a transfer of economic resources, cannot be caught within the scope of either 'financial contribution' or 'price or income support'".[952]

In respect of efforts that have been made to challenge export restraints through the Anti-Dumping Agreement, however, such efforts failed in the case of *EU–Biodiesel*. In that case, the EU alleged that the domestic price of soybeans and soybean oil, which are the inputs of biodiesel, are depressed due to export restraints imposed on soybeans and soybean oil, and hence distorts the costs of production of biodiesel producers in Argentina.[953] Based on Article 2.2.1.1 of Anti-Dumping Agreement, "costs shall normally be calculated on the basis of records kept by the exporter or producer…provided that such records…reasonably reflect the costs associated with the production and sale of the product under consideration..". In calculating the normal price for the purpose of finding dumping, the EU decided not to use the cost of soybeans in the production of biodiesel in Argentina. The Panel held that Article 2.2.1.1 is "to establish whether the records reasonably reflect the costs actually incurred, and not whether they reasonably reflect some hypothetical costs that might have been incurred under a different set of conditions or

[950] *Id*., at 125.
[951] Panel Report, *US — Countervailing Duty Investigation on DRAMs*, WT/DS296/AB/R, para. 8.38.
[952] Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), 124; Robert W. Staiger and Alan O. Sykes, "Currency Manipulation; and World Trade," 9 *World Trade Review* 04, 583-627 (Oct. 2010), 610-11.
[953] AB report, *European Union-Anti-Dumping Measures on Biodiesel from Argentina*, WT/DS473/AB/R, adopted 6 Oct. 2016, para. 5.4,

circumstances and which the investigating authority considers more 'reasonable' than the costs actually incurred."[954] The AB upheld the Panel's decision.[955] Therefore, the textual words "records…reasonably reflects the costs…" of the Anti-Dumping Agreement casts limitations in that it only requires that records reasonably reflect the costs actually occur, rather than a judgement of the reasonableness of the actual costs, which are lower than costs in the absence of export restraints. To that end, the situation of export restraints imposed on inputs, and hence affect prices of downstream industry, cannot be solved through the Anti-Dumping Agreement.[956]

The above literature didn't examine export restraints imposed in relation to SOEs, particularly in the context of China, the analysis of which is different both in terms of challenges and solutions. There are difficulties for the current WTO rules to reach export restrains imposed by governments. It is even more difficult for the current WTO rules to reach export restraints effectively applied by SOEs without governmental measures.

Conclusion of (2)

WTO rules inadequately regulate behavior of those that have been granted such monopolies or exclusive rights in aspects of coverage and types of behavior. Only some SOEs are disciplined. SOEs with trading monopolies or exclusive rights are subject to Article XVII. While it remains ambiguous whether SOEs with monopolies or exclusive rights in production or distribution can be covered by Article XVII given that it is a case-by-case analysis to examine whether import or export are affected or not. SOEs with natural resources exploitation rights are likely to escape disciplines given that it is not easy to find out whether governments retain certain control over the trading activities of these SOEs.

[954] Panel Report, *European Union-Anti-Dumping Measures on Biodiesel from Argentina (EU-Biodiesel)*, WT/DS473/R, adopted 6 Oct. 2016, para. 7.242.
[955] AB Report, *EU-Biodiesel*, WT/DS473/AB/R, adopted 6 Oct. 2016, para. 6.26.
[956] Such litigation strategy was also used recently by some complaining parties, for instance, in the case of *Ukraine-Anti-Dumping Measures on Ammonium Nitrate*. "Ukraine rejected the price of natural gas actually paid by Russian producers of ammonium nitrate, replaced it with the adjusted export price of natural gas that is delivered at the German border." *See Ukraine-Anti-Dumping Measures on Ammonium Nitrate*, request for consultation by the Russian Federation, WT/DS493/1, G/L/1114, G/ADP/D109/1, 12 May 2015, p. 2, item 4.

Only some behavior is regulated. The national treatment obligation does not apply to SOEs with monopolies or exclusive rights, due to the narrow interpretation of the non-discrimination principle in GATT Article XVII:1(a), and the applicability issue of GATT Articles III, II:4 and XI. SOEs after receiving monopolies or exclusive rights from governments are more likely to follow decisions of governments, and are influenced by governments. However, only SOEs in trade in goods are disciplined in this regard, and no commercial considerations requirement exists in GATS. In respect of trade in goods, the commercial considerations based obligation in Article XVII:1(b) is dependent on Article XVII:1(a)'s non-discrimination obligation. What's more, sales maximization or selling at lower prices per se, rather than profits maximization, doesn't necessarily violate the commercial considerations obligation according to current WTO jurisprudence.

SOEs after receiving monopolies or exclusive rights, are more likely to engage in anticompetitive activities. Some anticompetitive behavior is captured partially by current WTO rules. However, taking advantage of monopolies or exclusive rights in non-reserved markets and abuses of dominant positions are not disciplined. Article XVII:1(b) concerns behavior based on non-commercial considerations, rather than anticompetitive behavior or unfair competition. Cross-subsidization by SOEs is not regulated by GATT in respect of trade in goods. Collusion and exclusion behavior among giant SOEs who enjoy monopolies or exclusive rights may not be disciplined effectively by the current WTO rules, such as the case study of the situation of export restraints. Specifically, although there are no explicit export restraint measures issued by the government, export restraints may be effectively implemented by SOEs, which are the dominant players in the upstream industry. GATT Article XVII, even combined Articles XVII and XI, and Article XI, is not likely to regulate the problem. Most literature has talked about general export restraints imposed by governments, and didn't examine export restraints imposed in relation to SOEs, particularly in the context of China, the analysis of which is different both in terms of challenges and solutions. There are difficulties for the current WTO rules to reach export restraints imposed by governments. It is even more difficult for the current WTO rules to reach export restraints effectively applied by SOEs in the absence of governmental measures.

In a nutshell, disciplining the behavior of SOEs that have been granted monopolies or exclusive rights is inadequate within current WTO rules. Only some SOEs are subject to disciplines. Only some behavior is regulated, leaving much behavior of SOEs undisciplined.

4.2.3 Regulatory Advantages Granted to SOEs

SOEs enjoy regulatory advantages, such as the exemption of government-assisted mergers and acquisition of SOEs from domestic competition laws, selective enforcement of domestic competition laws or anti-bribery laws in favor of SOEs, etc., and other regulatory advantages. But current WTO rules are not sufficient to address the problem.

First, the grant of regulatory advantages to SOEs is not covered by the SCM Agreement as it merely covers grants of "financial contribution" or "income or price support". However, at the outset, it is worth noting that the distinction between financial and non-financial assistance may be artificial.[957] Various authors have discussed the distinction between financial assistance and regulation. The former is commonly considered as a form of government action that may constitute a subsidy while it is controversial to treat regulations as a form of subsidy.[958] There are, however, different criteria that distinguish financial assistance from regulation, although it is argued that these criteria are not clear in drawing the line between what is and what is not a subsidy.[959] Although, all government regulatory policies have price effects on the inputs that are used by domestic firms to produce final products, subsidies disciplines generally ignore the effect of regulatory policies on the costs of firms. It is considered impractical to have "regulatory subsidies", i.e., to attack as a subsidy the failure of a foreign government to provide certain levels of regulation of environmental or labor protection. In the absence of measures of harmonization at the international level, it is within the sovereignty of each State to decide the level of environmental

[957] For a detailed discussion of whether regulation can be a subsidy and detailed analysis of elements of the SCM Agreement, as well as the distinction between regulatory measures and financial assistance, *see* Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), 94, 142-198.
[958] Merit E. Janow and Robert W. Staiger, "US-Export Restraints: United States---Measures Treating Export Restraints as Subsidies," World Trade Review, Vol.2(S1), 201-235 (Jan. 2003).
[959] Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), 94.

or labor protection in its society. The differences in standards between various states may affect competition, but they cannot be relevant as such for subsidy rules.[960]

Second, with respect to the approach of applying other trade rules, the trade rules that might be applicable in the situation of regulatory advantages granted to SOEs, are Articles II, III and XI of GATT, and the market access commitments and the national treatment obligation of GATS. As for rules regarding the national treatment obligations, they only work in the domestic setting in China, leaving SOEs overseas behavior and SOEs' exportation uncovered. It doesn't address the situation where SOEs after receiving regulatory advantages export goods/services to foreign markets. Furthermore, the issue of non-enforcement of bankruptcy laws, anti-trust law/competition laws and environmental laws in favor of SOEs is difficult to solve within the WTO. It is difficult to prove in individual cases that the SOE is in a similar situation as the FOE for the purpose of demonstrating "likeness" as required by the national treatment obligation. The enforcement of domestic regulatory laws is largely outside WTO's jurisdiction.

SOEs after receiving regulatory advantages, may obtain dominance in a market, and their behavior afterwards are similar to behavior of SOEs after receiving monopolies and exclusive rights. The analysis is the same as that in the section of II. 2.2 of chapter three.

In summary, current WTO rules cannot regulate the problem of SOEs receiving regulatory advantages to the extent that the grant of regulatory advantages to SOEs is not covered by the SCM Agreement due to the distinction between financial and non-financial assistance, such as regulatory policies. Other trade rules are not able to regulate the problem either due to limited coverage.

4.2.4 Transparency Requirements in the WTO and the Inadequacy in its Compliance

The WTO rules impose various transparency requirements on its Members. With respect to transparency of STEs, Members are required to notify their STEs and their operations according

[960] OECD, *Competition Policy in Subsidies and State Aid*, Competition Policy Roundtable, DAFFE/CLP (2001) 24, (Paris, OECD Publishing, 2001), 27-8; Marc Benitah, The *law of subsidies under the GATT/WTO System* (The Hague: Kluwer Law International, 2001).

to GATT Article XVII:4(a) and paragraph 1 of the Understanding of Article XVII. The Working Party on State Trading Enterprises reviews notifications.[961] The format for such notifications is a standard questionnaire.[962] The notifications are made to the Council for Trade in Goods and circulated to all members. Counter-notifications may also be made by a member.[963] With regard to which product of the entity is subject to notification, the notification covers all the products over which the entity has authority, even if the STE in question has not affected any imports or exports during the reporting period. Hence, Members shall notify the enterprises referred to in paragraph 1 of the Understanding whether or not imports or exports have in fact taken place.[964] With regard to what information needs to be submitted associated with the STE, information includes the criteria the STE used to make decisions regarding quantity, price of imports or exports, and resale prices; whether private traders are allowed to import or export and on what conditions; whether there is free competition between private traders and the STE; all exclusive or special rights or privileges granted to the STE, as well as any other support or assistance provided by the government; the relationships between governments and STEs referred to on the illustrative list; and etc.[965] With respect to financial advantages, Article 25 of the SCM Agreement specifies the notification requirement for subsidies subject to the SCM Agreement. China is also required to undergo transitional reviews under Section 18.2 of China's Protocol of Accession to the WTO Agreement, including the provision of information on granting of subsidies.

However, the compliance with the notification requirement is poor. In respect of the notification requirement regarding STEs, from examining annual reports of the Working Party on STEs from 1995 to 2015, it seems that many agenda items would be put on the table to deal with STEs at the very beginning, such as completing the Illustrative List, finishing questionnaire, solving non-compliance with notification requirement, and the European Union even proposed discussing the

[961] The mandate of the Working Party is set out in paragraph 5 of the Understanding on the Interpretation of Article XVII of the General Agreement on Tariffs and Trade 1994.
[962] Report (2002) of the Working Party on State Trading Enterprises, G/L/591, adopted 21 November 2002; 1960 questionnaire on state trading (BISD 9S/184-185); 1998 revision of the questionnaire on state trading (G/STR/W/30) [draft]; (G/STR/3), adopted on 14 November 2003 (G/STR/3/Rev.1), *see* G/STR/3/Rev.1. G/STR/5; G/STR/6 and G/STR/7.
[963] Understanding on the Interpretation of Article XVII of the GATT 1994, para. 4.
[964] Understanding on the Interpretation of Article XVII of the GATT 1994, para. 3.
[965] The questionnaire requires every Member to furnish statistics, by quantity and value, on imports, exports and national production of the products notified. *See* STEs on the WTO Website.

adequacy of Article XVII.[966] However, later on, few members complied with the notification requirements, and the agenda of the Working Party is now limited to a certain range of mandates authorized by Members. Although the required frequency of notifications has been reduced, some members still have not submitted notifications.[967] Some STEs in many countries went unreported for years. Very few Members complied with the notification requirement, even where there were no STEs to report.[968]

The non-transparency problem is particularly severe in the context of China. Two concerns are raised. One is that due to the non-transparency problem in China, it is very hard for trading partners to gather information, and the other is that notifications submitted by China in pursuance to the trade policy review and other requirements under the WTO rules are not adequate. It makes it harder for trading partners to complain about the non-compliance. For instance, with regard to China's notification under the SCM Agreement, in October 2011, China notified to the WTO its subsidy programs during 2004-2008.[969] However, in many cases there are no figures on the magnitude of support provided, and no information is available on subsidies provided at the provincial level.[970] The United States filed a counter notification detailing 200 central and sub-central government subsidies that had never been notified by China.[971] In these circumstances, Article 25.10 called on China to notify those subsidies promptly. However, in its subsequent subsidies notification, China included only 10 of the 200 subsidies identified in the U.S. counter notification and has not taken any further action.[972] The consequence of non-compliance with notification requirements is only peer pressure on the non-compliant members at committee

[966] Report (2006) of the Working Party on State Trading Enterprises, G/L/788, adopted 16 October 2006.
[967] Report (2008) of the Working Party on State Trading Enterprises, G/L/857, adopted 6 October 2008; "New and full notifications were first required in 1995 and, subsequently, every third year thereafter, while updating notifications are to be made in the intervening years, indicating any changes since the last new and full notification," *See* Report (2002) of the Working Party on State Trading Enterprises, G/L/591, adopted Nov. 21, 2002.
[968] Understanding on the Interpretation of Article XVII of the General Agreement on Tariffs and Trade 1994.
[969] WTO Committee on Subsidies and Countervailing Measures, *Subsidies: New and Full Notification Pursuant to Article XVI:1 of the GATT 1994 and Article 25 of the Agreement on Subsidies and Countervailing Measures*, G/SCM/N/155/CHN (G/SCM/N/186/CHN), 21 October 2011; WTO Trade Policy Review Body, *Trade Policy Review: Report by the Secretariat: China*, WT/TPR/S/264, May 8 2012, Summary.
[970] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China: Record of the Meeting*, WT/TPR/M/264, July 17, 2012, para. 57.
[971] WTO Committee on Subsidies and Countervailing Measures, *Subsidies: Request from the United States to China Pursuant to Article 25.10 of the Agreement*, G/SCM/Q2/CHN/42, 11 October 2011.
[972] WTO Trade Policy Review Body, Report by the Secretary, *Trade Policy Review: China: Record of the Meeting*, WT/TPR/M/264, July 17, 2012, para. 66.

meetings at the WTO. It is not strong enough to induce members to comply with notification obligations.

The reasons for failure to notify may be incapacity of members, disagreement on substantive provisions, such as the definition of STEs, and that members are afraid of providing information that may be used in the dispute settlement mechanism against them.

4.3 Conclusion of Chapter 4

In light of the widespread presence of SOEs in China, the essential difficulties in addressing the problem of SOEs receiving advantages lie in two aspects: one is the relationship between the government and SOEs (identification of SOEs, whether SOEs are public bodies, whether SOEs are independent from governmental intervention or control, whether SOEs are directed or entrusted by the government, whether the behavior of SOEs can be attributed to the government and under what conditions), and the other is the behavior of SOEs (such as SOEs giving advantages to other SOEs, various anti-competitive behavior, non-commercial considerations, etc.).

I have explored existing WTO rules to find possible solutions to the problem of SOEs getting various advantages. Basically, the WTO rules scattered across different issues may address a piece of the problem but do not address adequately the problem as a whole.

First, I laid out the existing WTO rules that can discipline financial advantages granted to SOEs in the area of trade in goods, trade in services, and trade-related investment, existing WTO rules that can discipline advantages of monopolies and exclusive rights granted to SOEs in the above three areas, existing WTO rules that can discipline regulatory advantages granted to SOEs in the three areas, and the special rules agreed to by China in its accession to the WTO with respect to advantages granted to SOEs.

Most importantly, I explained how the current WTO rules cannot cover some issues related to SOEs, and how the current rules are deficient even if they can be maximized to address issues related to SOEs getting advantages. In respect of financial advantages enjoyed by SOEs, I show the deficiency in rules disciplining financial advantages granted to SOEs through the following

issues (i) the problems of SOEs giving financial advantages to other SOEs; (ii) the problem of upstream subsidies in the context of Chinese SOEs; (iii) the problem of privatization in the context of Chinese SOEs; and (iv) the problem of finding "specificity" and "benchmark prices" in the context of Chinese SOEs. With respect to the deficiency of rules regarding disciplining advantages of monopolies and exclusive rights granted to SOEs, I demonstrate that there is inadequacy in that the WTO allows the grants of monopolies and exclusive rights and the efforts in WTO jurisprudence that tried to implicitly attack the grants of monopolies or exclusive rights failed to some degree. I also demonstrate that there is inadequacy in regulating the behavior of SOEs with monopolies and exclusive rights, or regulatory advantages, including such actions as the discriminatory behavior, decisions not based on commercial considerations, and anti-competitive behavior, etc. With respect to the inadequacy in rules regarding disciplining regulatory advantages granted to SOEs, current WTO rules are limited to regulate such grants of regulatory advantages. Last, I show that there is also inadequacy in the transparency requirements of the WTO and that Members' compliance with the notification and transparency requirements is unsatisfactory.

Chapter 5: Proposals to the WTO Rules to Address the Problem

In this Chapter, I make proposals to address the deficiencies in WTO rules that were addressed in Chapter three. I have divided the proposals into three groups, (i) proposals relating to improving WTO trade remedies; (ii) proposals relating to improving WTO trade rules generally and (iii) proposals for adding competition rules to the WTO Agreement. At the outset, however, several general issues common to all proposals will be discussed. Lastly, a combination of the three types of rules will be examined with explanations of what different combinations would be necessary in order to solve all the problems. Most proposals draw inspiration either from the Trans-Pacific Partnership Agreement (TPP model) or the European Union rules (EU model). Some are based on my innovation and other sources.

5.1 Commonalities

All three proposal groups have the following commonalities. They have rules governing SOEs receiving advantages distinct from rules governing POEs receiving advantages. There is a distinction made between exceptions available to SOEs receiving advantages and exceptions available to POEs receiving advantages. Rules regarding SOEs receiving advantages will be applicable in respect of the areas of trade in goods, trade in services, trade-related investment in goods, and trade-related investment in services.

First, all three proposal groups treat SOEs separately from POEs. The problems are different in the context of SOEs, as opposed to privately-owned enterprises (POEs). Due to the relationship between SOEs and governments, such as the network among managers and governmental officials through rotation, the following differences between SOEs and POEs can be found, particularly with respect to the impacts on markets. i) SOEs can act as givers of advantages; ii) SOEs receive more advantages on more favored terms; iii) SOEs' lobbying power to get advantages is large such as in China; iv) the behavior of SOEs after they receive advantages is different as opposed to POEs in that a) SOEs are more likely to pursue revenues, rather than profits; b) SOEs have public objectives/motives in addition to commercial objectives/motives, and will be more likely to get compensation from governments for acting pursuant to these public objectives/ motives; in

contrast, POEs are more likely to respond to market signals, while SOEs are less likely to respond to market signals since they have other objectives to pursue; c) decisions of SOEs are more likely to be influenced by governments while POEs have broader options than SOEs. For instance, Chinese SOEs will follow the governments' industrial policies and macro policies, like prices, set by NDRC (National Development and Reform Commission).[973] Furthermore, government barriers to trade are distinguished from private barriers to trade, and barriers to trade associated with SOEs may be identified somewhere between these two barriers thereof.

This distinction was inspired by the proposed TPP Agreement, which has a chapter named SOEs and designated monopolies that deals with the behavior of SOEs, non-commercial assistance to SOEs, and behavior of SOEs that have been granted monopolies.[974] The proposed TPP Agreement establishes separate disciplines on i) financial advantages granted to SOEs, which are subject to the provisions regarding non-commercial assistance to SOEs, from those granted to POEs in general, which are subject to WTO rules regarding subsidies; and ii) the behavior of SOEs from the behavior of POEs, which are subject to a separate chapter on competition rules. In the TPP Agreement, there are detailed obligations and rules in the Chapter on SOEs as opposed to only a few soft rules in the Chapter on competition policy, which is primarily applicable to POEs. The comparison indicates that disciplining SOEs receiving advantages in the TPP negotiation encountered fewer obstacles than negotiating disciplines on POEs, and there were more concerns regarding SOEs.

Second, the separation between the treatment of SOEs and POEs can also be found in proposals regarding exceptions and justifications. Currently, there are no general exceptions available in the SCM Agreement. In contrast, violations of other GATT or GATS rules might be justified under the general exceptions provisions, e.g., GATT Article XX and GATS Article XIV. The proposals embody the following considerations. First, the proposals distinguish between exceptions available

[973] In China, NDRC (National Development and reform Commission) is a very powerful agency, the head of which is in a position higher than the minister of commerce, although they are supposed to be equal by law. In contrast, SOEs' micro policies are set by SASAC (State-Owned Assets Supervision and Administration Commission of the State Council) regarding assets and profits of SOEs. Currently, it is not clear whether the independence of SOEs is going to be reduced or enhanced.

[974] *See* the Proposed Trans-Pacific Partnership Agreement (signed 2016), Chapter 17 on State Owned Enterprises and Designated Monopolies. It also has Chapter 16 on competition policy, which allows each Member's national competition law to be applicable to all commercial activities.

to SOEs receiving advantages and exceptions available to POEs receiving advantages. I prefer reducing the scope of exceptions for advantages granted to SOEs, as opposed to the TPP approach.[975] Second, the proposals provide that exceptions cannot be invoked in the case of export related grants of advantages to SOEs and non-commercial assistance granted to SOEs solely as a result of state ownership or control, given that the situation where advantages granted to SOEs solely as a result of their state ownership is distinct from the debate that subsides are widely used as instruments for the promotion of social and economic policy objectives and the concerns of WTO overreach into domestic policy.

From a normative perspective, the scope of justifications should be distinguished from the scope of advantages, which should be defined objectively. The analysis of purposes for granting advantages should be at a subsequent and different level.[976] For instance, the argument that grants of certain advantages to SOEs are compensation for a disadvantage imposed on those SOEs, should be put in the discussion of justifications rather than the discussion of the scope of advantages.[977] With respect to the extent of permitted justifications, although some justifications should be available for members to pursue legitimate objectives, which are either related to efficiency (correcting market failure) or distributive objectives,[978] some justifications no longer work nowadays based on the following balancing tests, i.e., i) whether granting advantages to SOEs is the best tool to achieve the objective, or whether the objective can be better achieved by other alternative means rather than the means of giving advantages to SOEs; ii) cost-benefit analysis; and iii) the proportionality principle.[979] The cost-benefit analysis and the proportionality principle were inspired by the EU rules.[980] The Commission reviews state subsidies to business to assess

[975] Chapter 29 of the TPP Agreement provides that GATT Article XX and GATS Article XIV are applicable to the Chapter 17, which is about SOEs.
[976] Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), 23, 389.
[977] WTO Committee on Subsidies and Countervailing Measures, *Subsidies: New and Full Notification Pursuant to Article XVI:1 of the GATT 1994 and Article 25 of the Agreement on Subsidies and Countervailing Measures*, G/SCM/N/155/CHN (G/SCM/N/186/CHN), 21 October 2011, para. 151.
[978] However, an empirical finding of Vietnam giving interest rate subsidies during economic crisis, found that many subsidies were used by enterprises in stock market speculation or real estates, rather than in production or expansion. Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), 45.
[979] Michael J. Trebilcock and Robert Howse, *The Regulation of International Trade*, 3rd edition (Routledge, 2005), 282.
[980] Joaquin Almunia, *9th Global Forum on Competition*, held in Paris, 18-19 Feb. 2010, available at https://www.oecd.org/daf/competition/abuse/9thoecdglobalforumoncompetition18-19february2010.htm

their impact on competition.[981] Taking another example, the justification of compensating SOEs for bearing the burden of employment, social responsibilities, and social security function, may no longer work. For instance, such social costs imposed on SOEs account 1.55% of total costs of Chinese SOEs in the coal industry.[982] Furthermore, an independent and separate social security system in China has been established in 2000, reducing any need to compensate SOEs for social security functions.[983]

With respect to how to provide justifications/exceptions, the placement of justifications will be different under three approaches. With respect to the competition rules approach, I propose to have an independent set of exceptions. With respect to the trade remedies approach, given that the SCM Agreement doesn't have exceptions and the applicability of general exceptions of GATT to subsidies is debatable, I propose to utilize the "specificity" element to serve as a tool to recognize some legitimate interests and policies, or to introduce an independent set of exceptions, or carve out certain types of subsidies, which has been suggested by some scholars.[984] Given that the provisions on non-actionable subsidies in the SCM Agreement expired in 2000 due to opposition to renew them, it seems that it is hard for Members to agree on permitted subsidies. With respect to the trade rules approach, I propose to put some exceptions into the analysis of substantive obligations, or to have an independent set of exceptions. The former proposal was inspired by the NAFTA case of *UPS v. Canada*. Canada asserted that UPS Canada and Canada Post were not in like circumstances because only Canada Post could guarantee nationwide delivery of publications to all residential addresses in Canada, and assuring nationwide delivery to all residential addresses was an essential aspect of its public policy goal, although they were directly competing in the courier business. It was recognized by the Tribunal who put the analysis of "public policy" into

[981] The fundamental principles were laid down in 1957, as a necessary condition to achieving a common market in goods and services in the EU, and remain unchanged today in the new Lisbon Treaty. *See* George Bermann, Roger Goebel, William Davey and Eleanor Fox, *Cases and Materials on European Union Law*, 3rd edition (West Academic Publishing, 2010).
[982] "The Internalization of the Costs, Prices, and External Prices of Coal," *Unirule Institute of Economics* (2008).
[983] State Council, "Notification Regarding Ensuring the Payment of Pension on Time for Retired Employees from Enterprises and SOEs" No. (2000) 8; "The Nature, Performance, and Reform of the State-owned Enterprises," *Unirule Institute of Economics* (June 12, 2011), 78-83; Xuejin Zuo and Hangsheng Cheng, *State-owned Enterprise Governance in China: An International Comparative Perspective* (China: Social Science Academic Press, 2006), 1-14, and 40-49.
[984] Robert Howse, "Do the World Organization Disciplines on Domestic Subsidies Make Sense? The Case for Legalizing Some Subsidies", in Kyle W. Bagwell and George A. Bermann (eds.) *Law and Economics of Contingent Protection in International Trade* (Cambridge University Press, 2009), 85-102.

the analysis of "like circumstances", which is in the substantive obligation, i.e., the national treatment obligation, and concluded that there are legitimate considerations for treating postal and courier services separately.[985]

Third, current WTO rules have separate disciplines on advantages granted to enterprises in the areas of trade in goods, trade in services, trade related-investment in goods, and trade related-investment in services. For instance, the SCM Agreement only applies to trade in goods. However, there is no economic rationale for leaving one specific area undisciplined. [986] All areas should be covered. For instance, modifications can be made so that the SCM Agreement is applicable to all areas including trade in goods, trade in services, and trade related-investment. This proposal was inspired by the proposed TPP Agreement, which applies the same rules to all kinds of markets, regardless of whether they are domestic markets or foreign markets, except for the area of trade in services in the domestic market. The reason for leaving the area of trade in services in the domestic market not covered, probably, is not out of an economic rationale, but rather, is out of a political compromise given opposition from countries with SOEs that wanted to protect their domestic service providers. This proposal was also inspired by the state aid rules in the EU model, which have general applicability, i.e., applicable to all state aid in the areas of trade in goods and services, except for sectors that do not affect trade between member states.

WTO Members hold divergent positions on this issue. Several WTO Members have proposed to define a subsidy in the area of trade in services without the requirement of "a financial contribution", which is the goods model, given that the nature of services is different from the nature of goods.[987] Second, the distinction between trade in goods and trade in services in the WTO can be traced back to the negotiating history, which indicates that the distinction is largely related to political contingency, rather than rational reasons. It might be much easier to conclude an

[985] *United Parcel Service of America Inc. v. Government of Canada (UPS v. Canada)*, UNCITRAL, Award on the Merits (24 May 2007), paras. 92 and 97; States should have stated reasons in advance rather than ex post. *See* Dissenting Opinion of Arbitrator (Separate Statement of Dean Ronald A. Cass), *UPS v. Canada*, para. 124, p. 40.
[986] Alan Sykes, "The Questionable Case for Subsidies Regulation: A Comparative Perspective," Law and Economics Research Paper Series Paper No. 380.
[987] WTO Working Party on GATS Rules, "Communication from Chile: The Subsidies Issue," S/WPGR/W/10, 2 April 1996, p 1; Report by the Chairperson on the Working Party on GATS Rules, *Negotiations on Subsidies*, S/WPGR/10, 30 June 2003, para. 15; Gary N. Horlick and Peggy A. Clarke, "WTO Subsidies Discipline During and After the Crisis," 13(3) *Journal of Int'l Economic Law* (2010): 859-874, 873.

agreement on trade in goods than one on services due to the fact that trade in services was less common and domestic protection of services was intense at the time of WTO negotiations. Third, given that trade in services increased in the past decades and global markets for trade in services advanced, the demand for more openness of the area of trade in services and reducing the protection for domestic services is increasing. Last, there is no theoretical basis for such a distinction between the area of trade in goods and the area of trade in services with respect to advantages granted to SOEs. In addition, there is interplay between goods and services and hence, the line dividing trade in goods and trade in services are vague.[988]

5.2 Trade Remedies Proposals

My trade remedies proposals are focused on changes to the SCM Agreement so as to ensure that financial advantages received by SOEs are adequately controlled. For reasons explained below, I do not propose to deal with the problem of SOEs receiving monopolies and exclusive rights or regulatory advantages, and their behavior afterwards, under the SCM Agreement.

5.2.1 Financial Advantages

With respect to financial advantages, the first issue is that SOEs, such as SOBs, give financial advantages, such as capital and other inputs, to other SOEs. Given that it is governments, rather than enterprises, that are primarily subject to WTO obligations, the issue of governments giving financial advantages to enterprises will be regulated by the WTO rules, while the issue of SOEs giving financial advantages to enterprises will largely escape disciplines of WTO rules. The current WTO rules are not sufficient to solve this problem given that first, it is hard to attribute SOEs' behavior to the government within the meaning of the SCM Agreement. The Agreement provides that a subsidy shall be deemed to exist only if there is a financial contribution by a government or public body, and one form of financial contribution is where a government entrusts or directs a private body to carry out the financial contribution. The standard for satisfying the "entrust/direct" standard is strict, i.e., it requires an "explicit and affirmative action of delegation

[988] There is no definition of "services" provided in GATS. In the case of *China — Publications and Audiovisual Products*, it was disputed whether films and sound recordings are services or goods. The Panel held that the measure affects both trade in goods and services, and hence it could be a violation of both GATT and GATS. *See* Panel Report, *China — Publications and Audiovisual Products*, WT/DS363/R, adopted 21 Dec. 2009, paras. 4.301-4.313.

or command, and state ownership and control cannot automatically imply the existence of "entrustment/direction". Hence, it is hard to attribute SOEs' behavior to the government. Second, it is hard to treat SOEs as public bodies that are capable of giving financial contribution to others within the meaning of SCM Agreement. The current jurisprudence has adopted the "vested governmental authority" standard, ruling that a public body is an entity that possesses, exercises, or is vested with governmental authority, and that one factor, such as "government control", is not sufficient and determinative. By rejecting the "government control" standard, initially adopted by panels and imposing a stricter test, the AB has made it difficult for SOEs to be considered as public bodies. Last, trade remedies rules do not regulate SOEs' behavior directly.

A second issue in respect of finding financial advantages under the SCM Agreement is the problem of upstream subsidies in the context of Chinese SOEs. For instance, the Chinese government gives subsidies to SOEs in the coal, electricity and railway industries, which therefore could provide lower prices for coal/electricity/transportation by railway to the steel/aluminum industries which are dominated by SOEs that export steel/aluminum to foreign markets. Under current WTO rules, foreign governments can only impose countervailing duties on imported goods sold by those enterprises that receive subsidies. Hence, SOEs in the steel and aluminum industries can argue that they are not the recipients of subsidies, it is the coal industry that receive subsidies directly from the government. However, the downstream industry may in fact benefit from transactions with subsidized SOEs in the upstream industry due to lower prices of inputs. The current WTO rules are not adequate to address the problem given that it is hard to treat SOEs in the upstream industries as public bodies that give lower prices of inputs to the downstream industries.

I would not propose to substantively change the definition of "entrust/direct" to mean that "state control can automatically imply the existence of entrustment or direction" since there may be situations of facial control where controllers do not interfere with the daily operation of the entity. Instead, I propose to change the interpretation of the SCM Agreement so as to treat as public bodies those SOEs who are under the government's meaningful control and are given monopolies or exclusive rights or dominant positions due to regulatory advantages in a particular industry within the meaning of the SCM Agreement. This proposal will be referred to as "the public body presumption proposal" hereinafter, i.e., it proposes that entities under the meaningful control of

the government, and with monopolistic or dominant market power, can be presumptively deemed to be public bodies, unless evidence to the contrary is put forth by the responding party with regard to the entity in question. The presumption of "public body" status of SOEs based on control and market status, places the burden of proof on the party who has the SOE to demonstrate either that "meaningful control" is not present in a sense that the government is not in actual control of daily operations, and that the decision-making of SOEs is independent, or that the SOEs in question do not enjoy monopolistic or dominant market power as a result of favor from governments. If these can be proved, the presumption is rebutted. It is sort of a middle position between the "government control" standard and the "government vested authority" standard that have been discussed in WTO jurisprudence so far.

The proposal doesn't go too far from the AB's "governmental authority standard". First, the AB states that its view on "public body" comes from the analysis of text, context, object/purpose, and that its interpretation merely "coincides" with "the essence of Article 5 of the ILCDAs", which provides that "The conduct of a person or entity which is not an organ of the State under article 4 but which is empowered by the law of that State to exercise elements of the governmental authority shall be considered an act of the State under international law, provided the person or entity is acting in that capacity in the particular instance."[989] It might be interpreted that SOEs that have been granted monopolies or exclusive rights are entities empowered by the state to exercise elements of the governmental authority given that most monopolies or exclusive rights are granted out of public interest, or at least governments so allege.

Second, the factor "meaningful control" doesn't go too far away from the latest jurisprudence and wouldn't raise too much controversy. The AB in *US-Carbon Steel (India)* clarified that the "meaningful control" factor shall not be assigned a decisive weight compared to other relevant factors.[990] In the latest case of *US-Countervailing Measures (China)*, the Panel seemed to view that the "meaningful control" factor was weighted significantly by the AB in *US-China AD/CVD*.[991] The Panel didn't question the U.S.' interpretation that "public body" can mean an

[989] International Law Commission, Draft Articles on Responsibility of States for Internationally Wrongful Acts, U.N. Doc. A/CN.4/L.602/Rev.1 (Jul. 26, 2001), art. 8; Michel Cartland, Gerard Depayre and Jan Woznowskl, "Is Something Going Wrong in the WTO Dispute Settlement?" 46 *J. World Trade* 979, 996-1001 (2012), 997.
[990] AB Report, *US — Carbon Steel (India)*, WT/DS436/AB/R, para. 4.37.
[991] Panel Report, *US Countervailing Measures (China)*, WT/DS437/R, adopted 14 July 2014, para. 7.74.

entity that is controlled by a government such that the government can use the resources of that entity as its own, citing the concept of "meaningful control" relied upon by the Appellate Body in *US –China AC/CVD*. The Panel in *US-Countervailing Measures (China)* found that the U.S. investigative authority didn't apply their alleged "meaningful control" standard in the investigated case at hand even assuming the alleged standard is the right interpretation of the term "public body". To that end, it can be inferred that the Panel didn't follow the AB explicitly to denounce the interpretation that "meaningful control" is a decisive factor in interpreting the term "public body", which the AB has clearly denounced in *US-Carbon Steel (India)*. The panel's attitude towards the significance of the factor "meaningful control" in the interpretation of the term "public body" seems different from that of the AB. Although the AB's view is more authoritative, the contradiction between the AB and panels may open the door for my proposal in the future.

Third, the factor relating to "market status" wouldn't go much away from the AB's interpretation. The AB mentioned that relevant factors may play different roles in different cases, such as the factor of market power and the industry in which the entity is. The AB explained that "whether the conduct of an entity is that of a public body must in each case be determined on its own merits, with due regard to the core characteristics and functions of the relevant entity, its relationship with the government, and the legal and economic environment prevailing in the country in which the investigated entity operates."[992] "Evidence regarding the scope and content of government policies relating to the sector in which the investigated entity operates may inform the question of whether the conduct of an entity is that of a public body."[993] Hence, the factor of whether the SOE enjoys monopolistic/dominant market positions out of receiving various advantages from the government could be a relevant factor.

The proposal can solve the problem of SOEs giving financial advantages to others, and the problem of upstream subsidies in the situation of SOEs from a legal viewpoint. One major reason that these two problems may escape the discipline of the SCM Agreement lies in that SOEs that are givers of advantages cannot fit into the categories of "governments" or "public body" captured by the SCM Agreement, and hence, it cannot be established that there is a subsidy given by a government

[992] AB Report, *US — Carbon Steel (India)*, WT/DS436/AB/R, para. 4.29.
[993] *Ibid*.

or public body. By treating SOEs who are under the government's meaningful control and are given monopolies or exclusive rights or dominant positions, as public bodies within the meaning of the SCM Agreement, the proposal expands the reach of SCM Agreement to many cases where SOEs give advantages to others, and where SOEs receive upstream subsidies and give advantages to downstream industries. The proposal makes it possible to establish there is a subsidy in these two situations and makes them subject to the discipline of SCM Agreement by focusing on the nature of SOEs as givers of advantages as a subject matter.

The proposal can solve the two problems largely from a practical viewpoint. First, the emphasis on the factor of whether the SOE enjoys monopolistic or dominant market positions out of receiving various advantages from governments, has economic grounds. If SOEs are in dominant positions in a specific industry or market, with no or little competition from POEs, these SOEs could provide goods or services lower than the world prices. If SOEs were not in dominant positions in a specific industry, their provision of goods or service at prices lower than the world prices would not affect the market too much since POEs can compete with them in the market. To that end, whether SOEs have monopolies or exclusive rights in the industry can be the standard for the typology of SOEs. For instance, SOEs in energy producing sectors may provide energy at prices below market rates to SOEs in other sectors. This proposal directly responds to the problem of productive inputs provided by SOEs to other SOEs.

Second, the presumption of SOEs under meaningful control of the government and with monopolistic or dominant market power as public bodies, fits into the reality of China and can well handle the problems at issue. For instance, Chinese SOEs in strategic industries, such as coal, airline and aviation, telecommunication, petroleum and petrochemical, shipping and manufacturing of ships, and electricity, enjoy monopolies or dominant market power due to statutory grants or governmental measures limiting competition in the favor of these SOEs. The Chinese Government usually maintains state ownership in absolute control of strategic industries with the purpose of "protecting public interest, national interest, and security interest". It fits into the "public body" discussion insofar the stress is all on the public interest. The proposal takes into consideration that it is difficult to gather evidence regarding SOEs due to their non-transparency. The proposal is more likely to motivate China to move toward a direction that could

produce evidence about Chinse SOEs not being meaningfully controlled by the government or reducing the predominant status of SOEs in strategic industries particularly. Hence, China may have the motive to reduce or eliminate the actual control over daily operation and management of SOEs, and the decision-making of SOEs may become independent and be commercially based, on the one hand, and to increase competition in strategic or pillar industries, on the other hand.

One additional problem in disciplining subsidies lies in the difficulty in establishing the legal requirement that an actionable subsidy must be specific.[994] Particularly in the situation of upstream subsidies in the context of Chinese SOEs, the requirement of "specificity" needs to be proved in situations where the SOEs in the upstream industry provide goods or services at lower prices or favorable terms to one or a certain number of industries, rather than all industries. Furthermore, despite China's commitments in its accession to the WTO that subsidies provided to SOEs will be viewed as specific if SOEs are the predominant recipients of such subsidies or SOEs receive disproportionately large amounts of such subsidies,[995] it is hard to find evidence regarding the outcome of a subsidy in terms of recipients.

I propose, instead of focusing on the outcome of a subsidy, to focus on the market power of recipients (SOEs) in question, or the status of SOEs in the sector, i.e., whether they are monopolistic or dominant in the industry, or enjoy exclusive rights to the exclusion of POEs, in finding the legal element of "specificity". This proposal comes with a rebuttable presumption rule that financial advantages granted to those SOEs are deemed to be specific unless evidence to the contrary can be proved. The proposal makes sense from economic and historical viewpoints. In the view of economists, the requirement of specificity cannot be explained by any economic rationale.[996] Specificity was not necessarily required by the 1979 Tokyo Round Subsidies Code.[997] Specificity is more of an administrative tool, and it embraces the "de facto" test.[998] It is due to

[994] Article 2 of the SCM Agreement.
[995] Para.10.2, Part I of the Protocol of China Accession to the WTO.
[996] An export restriction on one good will tend to diminish imports generally and will stimulate other exports, equivalent to import tariff and export subsidy. However, it doesn't meet the "specificity" requirement in the SCM Agreement. *See* Merit E. Janow and Robert W. Staiger, "US-Export Restraints: United States---Measures Treating Export Restraints as Subsidies," 2(S1) *World Trade Review*, 201-235 (Jan. 2003).
[997] *The Tokyo Round of Multilateral Trade Negotiations*, Report by the Director-General (Geneva: GATT, 1979), 181.
[998] John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd edition (Cambridge, MA: MIT Press, 1997).

administrative contingency and judicial economy, as well as the balance between the imposition of CVDs and grants of subsidies, that specificity is required in the SCM Agreement. The specificity test is a flexible test. For instance, it is more about legal technicalities that specificity is deemed to exist for export subsidies. Such flexibility and legal technicalities can be applied in cases involving giving advantages to SOEs, who are monopolistic or dominant in the industry, or enjoy exclusive rights to the exclusion of POEs.

Such a proposal can partially contribute to the solution of the problem of upstream subsidies in the context of SOEs, and other cases where subsidies are granted to industries which are dominated by SOEs. To find evidence of market status is easier than finding out who receives subsidies precisely and how much they receive.

It is also necessary to address the problem of benchmarks. To find whether there is a subsidy, it must be determined whether benefits are given to the recipients that are otherwise not available under normal market conditions. Hence, a benchmark is needed for such comparison. In cases of SOEs receiving advantages, SOEs may purchase inputs, and the input market, such as coal or natural resources, may be dominated by SOEs. It may be argued that the market in which SOEs operate may be distorted, particularly where SOEs are monopolists or in a dominant position. Although, article 15 (b) of China's Accession Protocol allows choosing a different benchmark in identifying and measuring the subsidy benefit if market economy conditions are not prevailing, it has been held in one case that the fact of SOEs' dominance in one market can be used to infer that the government played a predominant role in the market acting through SOEs. But in another case, it was held that the fact that SOEs are the predominant supplier does not per se establish that there is price distortion. In other words, in order to find out whether "market economy conditions are prevailing or not", it is necessary to examine whether prices are determined by market conditions or not, rather than to examine whether the government/SOEs dominate in the market in terms of market status.

I propose to have a presumptive rule regarding benchmarks, which can be applied in cases of SOEs receiving advantages where the SOEs are monopolists or dominant players.[999] In other words, it is refutably presumed that the fact that the government/SOEs is/are the predominant supplier(s) establishes that there is price distortion. For instance, selecting a different benchmark is allowed in the case of Chinese SOEs, who are dominant in the industry in question. Instead of focusing on the consequences of SOEs receiving advantages, such as whether the price is market-determined, the proposal focuses on the status of SOEs, the status of the market, whether it is dominated by the state or SOEs, the market power structure, whether the government is dominant through SOEs, whether there are systematic subsidies granted in association with the market, whether there is price control or prices set by SOEs, etc. Combining these factors together can be indicative of whether they lead inevitably to distortion of prices by making presumptive inference from status to the consequences, without demonstrating the consequences in fact. This proposal is made because of the underlying evidentiary issues given that information about all of the factors listed above may not be available in China. Hence, all factors are relevant and the rebuttable presumption can be made based on several of these factors.

Finally, in cases of partial privatizations of Chinese SOEs with a transfer of control to private entities, it is not clear whether subsidies received prior to privatization can still be subject to the SCM Agreement given that it is not clear based on current jurisprudence whether the legal element of "benefit" as required under the SCM Agreement would be extinguished or not. I propose to treat the benefits obtained prior to privatization as not extinguished even if the privatization is at arm's length and for fair-market value, given that competitive advantages still remain.

5.2.2 Monopolies or Exclusive Rights, and Regulatory Advantages

One problem I have found is that SOEs are more likely to be granted monopolies or exclusive rights or regulatory advantages, and most of the grants are not illegal under current WTO rules. First, in respect of trade in goods, Article XVII allows member to maintain state trading, and to grant monopolies or exclusive rights, as reflected in the wording of Article XVII:1(a). Second, the grant of exclusive rights or monopolies that do no fall within the definition of state trading

[999] John H. Jackson, *Restructuring the GATT System* (1990), 84-7.

enterprises under Article XVII are not covered by the WTO. Third, monopolies or exclusive rights cannot be challenged under the SCM Agreement, which only applies to financial advantages, i.e., "financial contributions" or "income support or price support". Lastly, in respect of trade in services, GATS Article VIII—monopolies and exclusive service suppliers, XVI—market access, XVII—national treatment, Article 5 and Annex 2A of the Protocol of China's Accession to the WTO that allows China to maintain exclusive trading rights for a list of goods, all presume the existence of monopolies or exclusive rights. Although, WTO jurisprudence has found certain types of exclusive rights or monopolies themselves in violation of the national treatment obligation or other special obligations, most of the holdings in cases are not sufficient to challenge the grants of monopolies or exclusive rights completely. Furthermore, regulatory advantages, such as mergers and acquisitions among SOEs that are assisted or directed by governments and that are exempted from domestic competition laws, and non-enforcement of bankruptcy laws, anti-trust law/competition laws and environmental laws so as to favor SOEs are problems that are difficult to solve under current WTO rules.

Within the trade remedies framework, it would be possible to propose to treat grants of monopolies, exclusive rights, or regulatory advantages as prohibited subsidies or as actionable subsidies subject to countervailing measures if certain conditions are met under the SCM Agreement. Such a proposal intends to expand the definition of subsidies beyond financial advantages to cover monopolies, exclusive rights and regulatory advantages.

However, I wouldn't make such a proposal for the following reasons. First, such a proposal would be hard to achieve due to the distinction traditionally made in the WTO/GATT between financial assistance and other types of advantages.[1000] Second, there is a distinction between the forms of the government action and the effects of the government action that are usually practiced by the EU model and the WTO for the basis of excluding "regulatory subsidies".[1001] Even though the EU model emphasizes the effect of conduct, the ECJ didn't embrace the concept of "a measure having

[1000] For a detailed discussion of whether regulation can be a subsidy and detailed analysis of elements of the SCM Agreement, as well as the distinction between regulatory measures and financial assistance. *See* Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), 94, 142-198. *See also Panel Report, US — Export Restraints*, paras. 8.65 and 8.73.

[1001] In order to constitute a state aid, the use of "state resources" is required, which are budgetary consequences for the government. Therefore, regulatory measures are not state aids within the EU rules. *See* Article 107.1 of TFEU.

an effect equivalent to State aid", e.g., public assistance featuring a regulatory element (price fixing, labor, insolvency laws). Such measures are not generally caught by State aid rules.[1002] Third, with respect to regulatory border measures, the EU does not subject border measures to state aid rules.[1003] Therefore, it might be too controversial to subject all regulatory measures to rules regarding subsidies or state aid.[1004] Lastly, the U.S., EU and many countries largely allow the existence of monopolies and exclusive rights, and hence, distinguishing grants of monopolies and exclusive rights from subsidies in practice. They subject the grants of monopolies and exclusive rights to competition laws rather than rules on subsidies.[1005]

5.2.3 Conclusion

In conclusion, the trade remedies proposals were discussed to address the problem of SOEs giving financial advantages to other SOEs; and the problem of upstream subsidies in the context of Chinese SOEs, where SOEs in the upstream industry receive subsidies and in turn give financial advantages to the downstream industry which is dominated by SOEs. I propose to treat as public bodies those SOEs who are under the government's meaningful control and are given monopolies or exclusive rights or dominant positions due to regulatory advantages in a particular industry within the meaning of the SCM Agreement. Hence, subsidies could be found in these two situations. I propose to focus on the market power of recipients (SOEs) in question, or the status of SOEs in the sector, i.e., whether they are monopolistic or dominant in the industry, or enjoy exclusive rights to the exclusion of POEs, in finding the legal element of "specificity". I propose to refutably presume that the fact that the government/SOEs is/are the dominant supplier(s) establishes that there is price distortion, and hence allowing the selection of a different benchmark in finding whether a "benefit" exists or not for the purpose of finding a subsidy.

[1002] For a list of cases, *see* Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), 152.
[1003] *Id*., at 164.
[1004] *Id*., at 172.
[1005] *See* the U.S. Sherman Act, section 2; Article 106 is about the public undertakings granted special or exclusive rights and Article 37 is about state monopolies of a commercial character. *See* Articles 106 of TFEU (ex Article 86 TEC, ex article 90 Treaty of Rome) and 37 of TFEU. Other practices may be found in the proposed TPP Agreement about non-commercial assistance as elaborated in its Article 17.6, which excludes tax advantages and regulatory advantages.

With respect to monopolies, exclusive rights and regulatory advantages, I wouldn't propose to treat grants of monopolies, exclusive rights, or regulatory advantages as subsidies.

5.3 Trade Rules Proposals

My trade rules proposals focus on changing Article XVII on STEs, so as to expand it to cover SOEs in general and to make the obligations thereunder more rigorous.

5.3.1 Financial Advantages

SOEs give financial advantages, such as capital and other inputs, to other SOEs. In contrast, WTO rules normally regulate WTO Members' behavior rather than SOEs' behavior within the trade rules framework with some exceptions, such as rules regarding state-trading.

With respect to trade rules, as explained in more detail below, I propose to expand the coverage of GATT Article XVII to all SOEs with all kinds of monopolies and exclusive rights, and hence the obligation of making decisions solely based on commercial considerations in GATT Article XVII:1(b) can be applied to all SOEs with different kinds of monopolies or exclusive rights. Furthermore, Article XVII:1(b) should be revised to make it independent from Article XVII:1(a). To that end, SOEs with different kinds of monopolies or exclusive rights would be obligated not to give financial advantages to other SOEs.

This proposal has its origin in the negotiating history of GATT. At the London Conference, the UK proposed to define STEs by using a simple control criterion, i.e., any enterprise effectively controlled by the state should be considered an STE.[1006]

This proposal can solve the problem of SOEs giving financial advantages to other SOEs. Requiring those SOEs with different kinds of monopolies or exclusive rights to make decisions solely based

[1006] Douglas Irwin, Petros Mavroidis and Alan Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008), 157-161.

on commercial considerations would largely preclude them from giving financial advantages to other SOEs.

5.3.2 Monopolies or Exclusive Rights

The problem I found is that SOEs are more likely to be granted monopolies or exclusive rights or regulatory advantages than POEs, and most of these grants are not illegal under current WTO rules. The other problem is that SOEs receiving monopolies or exclusive rights are more likely than POEs to engage in anti-competitive behavior and behavior influenced by governments. In theory, it is possible to propose to eliminate giving monopolies or exclusive rights to SOEs. However, I would not put forth such proposal given that the establishment of SOEs are in nature linked to grants of some monopolies or exclusive rights. I stand by the position that nations are free to establish SOEs according to their sovereign rights. Prohibition of giving monopolies or exclusive rights to SOEs will trigger a discussion on ownership to the extent that the right to establish SOEs will be undermined and the purpose of establishing SOEs will be compromised if such SOEs are not allowed to be given monopolies or exclusive rights. Hence, it is less likely to eliminate monopolies or exclusive rights to SOEs from a practical perspective. To that end, I will focus on the behavior of SOEs after receiving monopolies or exclusive rights, and propose accordingly.

(1) Regulating Behavior of SOEs with Monopolies or Exclusive Rights

One major problem I have identified is that SOEs receiving monopolies or exclusive rights are more likely than POEs to engage in anti-competitive behavior and behavior influenced by governments. As stated above, most behavior of SOEs after receiving monopolies or exclusive rights is not disciplined by current WTO rules. First, not all SOEs with monopolies or exclusive rights are subject to any behavior regulations. Only SOEs with exclusive trading rights are subject to Article XVII on state trading, and it remains ambiguous whether SOEs with monopolies or exclusive rights to production or distribution can be covered by these rules, given that it is a case-by-case analysis to examine whether imports or exports are affected or not. Second, only some behavior is regulated, leaving much behavior of SOEs after receiving monopolies or exclusive rights undisciplined. For instance, the anti-discriminatory obligations in GATT Article XVII only

refer to the most-favored nation obligation, rather than the national treatment obligation. It remains uncertain whether the commercial considerations obligation is a separate obligation from the non-discrimination obligation or is dependent on it. The obligation of "commercial considerations" is not concerned with anti-competitive behavior. Hence, STEs with exclusive or special privileges are not prevented from gaining a competitive advantage by making use of these privileges, and may put their competitors at a competitive disadvantage. Other anti-competitive behavior is not generally regulated.

To address these problems, I propose to modify current trade rules, i.e., GATT Article XVII. I propose, first, to expand the coverage of GATT Article XVII to all SOEs with all kinds of monopolies and exclusive rights; second, to impose non-discriminatory obligations through Article XVII:1(a), i.e., to embrace the national treatment obligation; and third, to expand the coverage of the obligation of commercial considerations applicable to GATS as well, and to make the "commercial considerations" obligation in GATT Article XVII:1(b) independent from GATT Article XVII:1(a) on the non-discrimination principle. However, I wouldn't propose to expand the content of "commercial considerations" obligation in GATT Article XVII to cover anti-competitive behavior.

First, with respect to expanding the coverage of GATT Article XVII to all SOEs with all kinds of monopolies and exclusive rights, this proposal has origin in the negotiating history. This proposal has been explained in the section III.1 on trade rules proposals in respect of financial advantages above.

Second, with respect to imposing non-discrimination obligations through Article XVII:1(a), i.e., to embrace the national treatment obligation, I would note first that there are no textual limitations in Article XVII:1(a) that exclude the national treatment obligation. The argument for such incorporation can be supported by both "textual interpretation" and "purposive interpretation".[1007] The AB's interpretation method is holistic in a sense that text, context, and purpose are all relevant

[1007] Article 31.1 of the Vienna Convention.

and must be considered.[1008] Given that the interpretation of the text in Article XVII:1(a) is consistent with the application of the national treatment obligation, nothing found in Article XVII, serving as context, goes against such an outcome from textual interpretation. Furthermore, GATS imposes the national treatment obligations on service monopolies or service suppliers with exclusive rights. The purpose of Article XVII:1 is to impose certain obligations, including the non-discrimination principle, on members that establish state trading, so that members cannot circumvent their obligations through the tool of STEs. According to VCLT, the negotiating history can be used to confirm the outcome of applying Article 31 of VCLT or to determine the meaning when the interpretation according to Article 31 (a) leaves the meaning ambiguous or obscure; or (b) leads to a result which is manifestly absurd or unreasonable.[1009] The interpretation of GATT Article XVII:1(a) to embrace the national treatment obligation is not manifestly absurd or unreasonable given that there is no textual basis to exclude the national treatment obligation, nor does it leave the meaning ambiguous or obscure. Thus, there is no need to look at the negotiating history, which should not be used to go against an interpretation which is an outcome of applying Article 31 of the VCLT. This proposal draws inspiration from the EU model and the TPP Agreement model. Within the EU rules, Article 37 of TFEU provides that non-discrimination principle should be applied to the situation of STEs.

Third, with respect to the proposal to expand the coverage of the obligation of acting in accordance with commercial considerations to be applicable to GATS as well, and to make the "commercial considerations" obligation in GATT Article XVII:1(b) independent from GATT Article XVII:1(a) on the non-discrimination principle, it essentially proposes that governments shall not interfere with decision-making of SOEs with monopolies or exclusive rights. Decision-making of SOEs shall be independent, solely based on commercial considerations, free from political intervention, and free from the government intervention or Party influence. This proposal was inspired by the TPP Agreement, which regulates the behavior of SOEs that have been granted monopolies, and provides that commercial activities shall be independent from government influence.[1010]

[1008] "Interpretation pursuant to the customary rules codified in Article 31 of the Vienna Convention is ultimately a holistic exercise that should not be mechanically subdivided into rigid components." *See* AB Report, European Communities–*Customs Classification of Frozen Boneless Chicken Cuts (EC-Chicken Cuts),* WT/DS269/AB/R, Sept. 12, 2005, para. 176.
[1009] Article 32 of the Vienna Convention.
[1010] Article 17.4 of the TPP Agreement.

Furthermore, some WTO Members have already set forth challenges regarding business decisions.[1011] Also, I would note that some WTO Members have already made commitments in this regard. For instance, Viet Nam undertook commitments that its

> "State-owned or State-controlled, including equitized enterprises in which the State had control, and enterprises with special or exclusive privileges, would make purchases, not for governmental use, and sales in international trade, based solely on commercial considerations, e.g., price, quality, marketability, and availability, and that the enterprises of other WTO Members would have an adequate opportunity in accordance with customary business practice to compete for participation in sales to and purchases from these enterprises on non-discriminatory terms and conditions."

Viet Nam undertook not to influence, directly or indirectly, commercial decisions on the part of enterprises that are *State-owned, State-controlled, or that have special and exclusive privileges*, including decisions on the quantity, value or country of origin of any goods purchased or sold, except in a manner consistent with the WTO Agreement and the rights accorded to non-governmental enterprise owners or shareholders.[1012] Viet Nam confirmed that:

> "without prejudice to Viet Nam's rights with respect to government procurement, all laws, regulations and other measures relating to the purchase or sale of goods and services, *by enterprises that are State-owned, State-controlled, or that have special or exclusive privileges*, that are for commercial sale, production of goods or supply of services for commercial sale, or for non-governmental purposes, would not be considered to be laws, regulations and measures relating to government procurement. Thus, such purchases and sales would be subject to the provisions of Articles II, XVI, and XVII of the GATS and Article III of the GATT 1994."[1013] (emphasis added.)

Finally, I wouldn't propose to expand the content of "commercial considerations" to cover anti-competitive behavior given that anti-competitive behavior is largely commercially motivated. There is an argument that "Article XVII is intended to catch protectionist conduct not easily impugned under other provisions of GATT given the avenues that STEs have for building

[1011] GATT Panel Report, *Canada – Provincial Liquor Boards (US)*, DS17/R, Feb. 18, 1992, BISD 39S/27, p. 8; Robert Howse, "State Trading Enterprises and Multilateral Trade Rules: The Canadian Experience," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis (1998), 187-8.
[1012] WTO Report of the Working Party on the Accession of Viet Nam, *Accession of Viet Nam: Report of the Working Party on the Accession of Viet Nam*, WT/ACC/VNM/48, 27 Oct. 2006, para. 78.
[1013] *Id*., para. 79.

protectionism into their day-to-day business decisions."[1014] On this view, the language of Article XVII concerning "adequate opportunity…to compete" could be interpreted as requiring more not-less-than equal opportunities in the sense of national treatment, and extending to a broader notion of contestability.[1015] However, the argument is not widely accepted and shared. Furthermore, the commercial considerations obligation is primarily and even exclusively about making decisions independently and free from governmental intervention. Much anti-competitive behavior is based on commercial considerations. To take an example, as for SOEs that have been granted a monopoly in the electricity sector where SOEs are the sole source, they may sell goods or services at different rates to different buyers, or at prices below cost. It may be considered as anti-competitive behavior. However, it has been argued that when an entity is the only seller---the mere fact of selling prices below cost by an entity is not automatically "non-commercial" within the meaning of Article XVII.[1016] Hence, it is hard to incorporate the obligation against anti-competitive behavior into the obligation of solely commercial considerations, and I wouldn't propose accordingly to expand the content of "commercial considerations" to cover anti-competitive behavior.

The proposals above within the trade rules framework could subject behavior of SOEs with all kinds of monopolies or exclusive rights in trade in goods or services to non-discrimination and commercial considerations obligations. However, the problem of anti-competitive behavior of SOEs cannot be solved within these proposals since I wouldn't propose to expand the content of "commercial considerations" to cover anti-competitive behavior.

5.3.3 Conclusion

With respect to financial advantages, I propose to expand the coverage of GATT Article XVII to all SOEs with all kinds of monopolies and exclusive rights, and hence make them subject to the obligation of making decisions solely based on commercial considerations in GATT Article XVII:1(b).

[1014] Robert Howse, *State Trading Enterprises and Multilateral Trade Rules: The Canadian Experience*, in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1 (University of Michigan Press, 1998), in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, (1998), 187.
[1015] *Ibid*.
[1016] *Id*., at 102.

With respect to SOEs with monopolies or exclusive rights, I propose to modify current trade rules, to expand the coverage of GATT Article XVII to all SOEs with all kinds of monopolies and exclusive rights, to embrace the national treatment obligation in Article XVII, to expand the coverage of the obligation of commercial considerations applicable to GATS as well, and to make the "commercial considerations" obligation an independent obligation. But I wouldn't propose to expand the content of "commercial considerations" obligation in GATT Article XVII to cover anti-competitive behavior.

5.4 Competition Rules Proposals

My competition rules proposals focus on adding competition rules in the WTO, so as to regulate the behavior of SOEs.

5.4.1 Financial Advantages

One problem that I have identified is that SOEs usually give financial advantages, such as capital and other inputs, to other SOEs. Given that it is the governments that are primarily subject to WTO obligations, the action of SOEs giving financial advantages to other SOEs will largely escape the discipline of WTO rules.

I propose to prohibit SOEs from giving financial advantages to others, particularly SOEs, to the extent that such behavior affect or distorts competition. The proposal has competition rules elements. More specifically, I would add to the WTO a provision such as Article 17.6 of the TPP, which provides:

> "Each Party shall ensure that its state enterprises and state-owned enterprises do not cause adverse effects to the interests of another Party [nor distort or threaten competition] through the use of non-commercial assistance that the state enterprise or state-owned enterprise provides to any of its state-owned enterprises with respect to:
>
> (a) the production and sale of a good by the state-owned enterprise;

(b) the supply of a service by the state-owned enterprise from the territory of the Party into the territory of another Party; or

(c) the supply of a service in the territory of another Party through an enterprise that is a covered investment in the territory of that other Party or any other Party."[1017]

The bracketed language is not in the TPP provision, but could be useful added. The bracketed language was inspired by the EU rules in that they regulate state aid within the competition rules framework to the extent that state aid threatens the goal of "a single market" pursued by European countries in the process of integration by threatening or distorting competition.[1018] It regulates state aid that distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods.[1019] The phrase "distort or threaten competition" in the bracket is not exactly the same as "cause adverse effects to another state's interests". The phrase "distort or threaten competition" adds something new. There might be a situation where the welfare of the subsidizing country decreases while the other countries' welfare may not decrease. Such situation can be captured by the phrase "distort or threaten competition" while might not be caught by the phrase "cause adverse effects to another state's competition".

This proposal can completely solve the problem of SOEs giving financial advantages to other SOEs since it captures all SOEs in areas of trade of goods or services (including selling goods and services in domestic market, exporting goods to foreign markets, providing services to foreign markets, and providing goods to foreign markets through investment establishment).

5.4.2 Monopolies or Exclusive Rights

The problem I have identified is that SOEs, after receiving monopolies or exclusive rights, are more likely to engage in anti-competitive behavior and behavior influenced by governments, such as discriminatory behavior, decisions not solely based on commercial considerations, etc.[1020]

[1017] Article 17.6(2) of the TPP Agreement.
[1018] George Bermann, Roger Goebel, William Davey and Eleanor Fox, *Cases and Materials on European Union Law*, 3rd edition (West Academic Publishing, 2010), 1043-44.
[1019] Article 107.1 of TFEU.
[1020] For the same reason explained in section III.2, I would not propose to eliminate giving monopolies or exclusive rights to SOEs under the competition rules proposals.

Domestic competition laws often do not cover anti-competitive behavior of SOEs, either out of legal protection or in fact protection that exempts SOEs from domestic competition laws. What's more, most of the behavior of SOEs after receiving monopolies or exclusive rights is not disciplined by current WTO rules. In particular, WTO jurisprudence has distinguished between behavior conducted on a non-commercial basis and anti-competitive behavior in interpreting GATT Article XVII, and doesn't regulate anti-competitive behavior.[1021]

If grants of monopolies or exclusive rights to SOEs are to be allowed, I would propose to regulate the behavior of SOEs after receiving monopolies or exclusive rights through competition rules as elaborated as follows.

i) Prohibition of monopolistic behavior or abuse of dominant market position in so far as it may adversely affect competition in any market: including such practices as limiting production, discriminating by applying dissimilar conditions to equivalent transactions with other trading parties, using tying arrangements, engaging in price discrimination, preventing entry of other enterprises, or engaging in cross-subsidization in that monopoly rent is transferred to "non-monopolized markets" by using monopoly rent to undercut prices or price below cost in the non-monopoly businesses (non-reserved markets), or taking advantage of monopolies or exclusive rights in the non-reserved sectors, or taking actions that have the effect of strengthening a dominant position in the market;

ii) Prohibition of horizontal restraints, such as agreements, understandings and concerted practices between or among competitors that limit production, fix prices, divide markets or assign quotas, and any other agreement that unreasonably restraints competition, for instance, cooperation or conspiracy among SOEs blocs with regard to reducing exports quantities and increasing export prices;

iii) Prohibition of vertical restraints, such as agreements, concerted practices and restraints in the course of distribution of products or services, or any agreement that prevent or restraint or distort competition unreasonably;

[1021] Panel Report, *Canada-Wheat Exports and Grains Imports*, WT/DS276/R.

iv) Requirements of divestiture of competitive activities from monopolistic activities, separating accounts, separating business entities as necessary;[1022] and

v) Domestic competition rules shall be applicable to SOEs.

This competition rule approach was inspired by the EU model. Public enterprises and enterprises to which Member States grant special and exclusive rights are subject to the EC rules on competition insofar as the application of such rules does not obstruct the performance of services of general economic interest.[1023]

This proposal solves the problem that SOEs, after receiving monopolies or exclusive rights, are likely to engage in anti-competitive behavior as elaborated above. The more detailed competition laws are in the WTO, the more helpful they will be for adjudicators to judge the ongoing day-to-day business decisions of SOEs with monopolies or exclusive rights.[1024]

5.4.3 Regulatory Advantages

With respect to regulatory advantages given to SOEs, such as exemption of government-assisted mergers and acquisition of SOEs from domestic competition laws, selective enforcement of domestic competition laws or anti-bribery laws in favor of SOEs, etc., these are not disciplined by the WTO rules. It might be argued that such regulatory advantages violate the NT obligation in a sense that SOEs are favored by domestic competition laws and enforcement, while FOEs are not. However, it is difficult to prove in an individual case where an SOE receives regulatory advantages that it is in a similar situation as the FOEs for the purpose of finding "likeness", as required by the national treatment obligation. Furthermore, the national treatment obligation only works in the domestic setting in China, i.e., when Chinese SOEs receive regulatory advantages in competition

[1022] Deutsche post case (EC law case); and Canada Post Service case (NAFTA case); R. Richard Geddes, "Anticompetitive Behavior in Postal Services," in *Competing with the Government, Anticompetitive Behavior and Public Enterprises*, eds., Richard R. Geddes (Hoover Institution Press, 2004), 100 and 106.
[1023] Jacques H.J. Bourgeois, "EC Rules on State Monopolies and Public Undertakings: Any Relevance for the WTO?" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1 (1998), 161-180, 173.
[1024] Robert Howse, "State Trading Enterprises and Multilateral Trade Rules: The Canadian Experience," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis (1998), 189-90.

with foreign enterprises in domestic Chinese market. It doesn't address the situation where SOEs export goods/services to foreign markets after receiving regulatory advantages.

I propose to prohibit government-assisted or mandated mergers and acquisition of SOEs to the extent that it will lead to concentration and have anti-competitive effects. Government-assisted or forced acquisition and mergers, consolidation, and concentration relating to SOEs would be prohibited through competition rules regarding merger control. It can be proposed in detail that "mergers and acquisitions among SOEs assisted by governments can be anticompetitive when they have the effect of facilitating express or tacit collusion, or when they lead to the creation or extension of a monopoly or dominant position, and hence to be prohibited".

This proposal solves the problem of giving regulatory advantages to SOEs in respect of government assisted mergers and acquisitions of SOEs, and subject them to domestic competition rules.

Proposals regarding regulating the behavior of SOEs after receiving advantages are similar to the proposals in the previous section about competition rules proposals for regulating behavior of SOEs after receiving monopolies or exclusive rights.

5.4.4 Conclusion

With respect to financial advantages, I propose to prohibit SOEs from giving financial advantages to others, particularly SOEs, to the extent that such behavior affect or distorts competition. With respect to monopolies or exclusive rights given to SOEs, if grants of monopolies or exclusive rights to SOEs are to be allowed, I would propose to regulate the behavior of SOEs which receive monopolies or exclusive rights through competition rules. With respect to regulatory advantages given to SOEs, I propose to prohibit government-assisted or mandated mergers and acquisition of SOEs to the extent that it will lead to concentration and have anti-competitive effects. In addition, my proposed competition rules for SOEs are like subsidy rules in that if a government does not prevent anti-competitive action by SOEs, there will be the possibility of a WTO remedy - a state to state remedy. I do not propose a remedy by private action. I neither propose an EU-like

commission or international regulatory infrastructure within the WTO, although I am not against enhancing the function of current existing committees and working groups within the WTO. Furthermore, I only propose to add some competition-like provisions relating to SOEs into current WTO rules, rather than proposing a competition regime into the WTO regime.

5.5 Combinations

From examining the proposals above, problems identified can be largely solved either through the combination of the trade remedies proposals and the trade rules proposals, or through the competition rules proposals alone.

As for the combination of the trade remedies proposals and the trade rules proposals, the problems with respect of financial advantages given to SOEs will be solved either through improving the SCM Agreement regarding "public body" "benchmark" "specificity", so that financial advantages given to SOEs will be controlled. More specifically, to treat as public bodies those SOEs who are under the meaningful government control and are given monopolies or exclusive rights or dominant positions due to regulatory advantages in a particular industry within the meaning of the SCM Agreement. In addition, the trade remedies approach proposes to focus on the market power of recipients (SOEs) in question, or the status of SOEs in the sector in finding the legal element of "specificity", and rebuttably presume that the fact that the government/SOEs is/are the dominant supplier(s) establishes that there is price distortion, and hence allowing the selection of a different benchmark to determine whether a "benefit" exists or not for the purpose of finding a subsidy.

Alternatively, the problems with respect of financial advantages given to SOEs will also be resolved through improving Article XVII so that certain SOEs will be covered and will be obligated to make decisions solely based on commercial considerations, and hence obligated not to give financial advantages to other SOEs.

With respect to monopolies and exclusive rights, trade rules proposals propose to improve GATT Article XVII so that behavior of SOEs after receiving monopolies or exclusive rights will be regulated, including discriminatory behavior and anti-competitive behavior and so on. However,

the regulatory advantages granted to SOEs will not be sufficiently resolved either through trade remedies proposals or trade rules proposals.

The competition rules approach proposes to prohibit SOEs from giving financial advantages to others, particularly SOEs, to the extent that such behavior affect or distorts competition. If grants of monopolies or exclusive rights are to be allowed, competition rules proposals would be needed to regulate the behavior of SOEs with monopolies or exclusive rights, or regulatory advantages. With respect to regulatory advantages given to SOEs, the competition rules approach proposes to prohibit giving regulatory advantages to SOEs, such as government-assisted or mandated mergers and acquisition of SOEs to the extent that they have anti-competitive effects.

In terms of effective remedies, it should be admitted that countervailing sanctions by an importing nation against foreign SOEs is more effective and direct. In contrast, a state to state remedy depends on the responding nation's measures taken to comply, either as ceasing current inconsistency by stopping giving advantages to SOEs or by preventing SOEs from behaving inconsistent with rules. A private action under domestic competition rules is also an effective and direct remedy. Although I do not propose a private action remedy, and I prefer the competition rules proposals with current WTO's state to state remedy, the concern that close relationship between SOEs and the responding nation may lead to no punishment against SOEs doesn't arise in this context. It is because the responding nation is required to either withdraw advantages granted to SOEs or stop SOEs from behaving inconsistent with rules. Otherwise, the responding nation may face countermeasures against it either in the same area or cross areas by other WTO Members under current WTO rules. To that end, the concern regarding regulators captured or SOE allies in a government is not of merits.

I would prefer the competition rules proposals since it can solve all the problems and can be practically adopted. The probability of implementing them respectively will be explored in the next Chapter.

Chapter 6: General Assessments of the Proposals Within the WTO Framework

Having made my different proposals in Chapter four above, this Chapter will proceed to assess the practicability of implementing the proposals from the following aspects. First, is whether the WTO is an appropriate forum to implement the proposals. Second, is how WTO's legal techniques can be utilized to implement the proposals. Third, is the political willingness of WTO Members to accept the proposals.

6.1 WTO as an Appropriate Forum to Implement the Proposals

6.1.1 WTO's Legitimacy

The WTO system recognizes different types of national economic systems, and from the initial establishment of GATT it has been neutral insofar as the ownership of enterprises is concerned. They might be privately owned or state owned. In the WTO system, it is the Members that are subject to various obligations. From the history of the WTO, it can be found that trade (i.e., border) measures are distinguished from domestic measures. Given that subsides are widely used as instruments for the promotion of social and economic policy objectives and their use concerns nations' sovereign rights, there is concern that disciplining subsidies strictly might thereby restrict legitimate domestic policies. Therefore, the pattern of WTO regulation shows there are strict rules on reducing tariffs and eliminating quotas, while there are loose rules on subsidies and state trading, let alone SOEs.[1025]

The limited effect of the rules on subsidies and STEs also derives from their limited purposes, i.e., to prevent circumvention of commitments already made in the WTO. Subsidies and state trading can affect international trade and trade agreements and lead to the circumvention of tariff commitments. Regarding subsidies, the object and purpose of the SCM Agreement is to impose multilateral disciplines on some forms of government intervention, i.e., subsidies that distort

[1025] John H. Jackson, *World Trade and the Law of GATT* (Lexis Law Pub., 1969), 305-8, 625-638; John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd edition (Cambridge, MA: MIT Press, 1997), 138.

international trade, or have the potential to distort international trade.[1026] The imposition of CVDs causes many trade disputes and has adverse effects. Hence, a need arises to balance the right to grant subsidies with the imposition of CVDs.[1027] In order to keep the balance, a definition of "subsidy" is given that defines "subsidy" in such a way as to avoid a broad definition.[1028] Also, specificity and an injury test are required for imposing CVDs. Regarding state trading, commitments such as tariff commitments and quota restrictions made by Members could be undermined or evaded if enterprises are granted exclusive trading rights and privileges.[1029] There are various activities by STEs that may subvert WTO commitments and principles: (i) STEs could circumvent the MFN principle by discriminating among trading partners in their purchasing and selling decisions; (ii) they could evade the GATT Article XI prohibition on quantitative restrictions by limiting quantities of imports or exports; (iii) they could go beyond tariff levels by imposing prices with higher than commercially normal mark-ups so as to effectively exceed permitted tariff levels; (iv) they could get around the national treatment principle by discriminating against imported goods in distribution or sales; (v) they could engage in non-transparent cross-subsidization activities or benefit from various forms of assistance from governments; and (vi) they might affect competition on export markets as they undercut other suppliers.[1030] Hence, for the purpose of preventing circumvention, current rules only discipline the behavior of STEs that undermine commitments on tariff or quota restrictions.

The limited effect of the rules also comes from one of the assumptions on which the WTO rules are based. Although the WTO is neutral as to forms of ownership, as noted above, it was market economies that were in mind when WTO rules were drafted. Governmental grants to POEs are the classic situation that was considered when drafters drew up the agreement. GATT rules assume

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[1026] Panel Report, *Brazil — Export Financing Programme for Aircraft* (*Brazil-Aircraft)*, WT/DS46/R, adopted 14 April 1999, para. 7.26; Panel Report, *Canada — Measures Affecting the Export of Civilian Aircraft (Canada — Aircraft)*, WT/DS70/R, adopted 14 Apr. 1999, para. 9.119.

[1027] AB Report, US – Countervailing Duty Investigation on Dynamic Random Access Memory Semiconductors (DRAMS) from Korea (US-Countervailing Duty Investigation on DRAM), WT/DS296/AB/R, adopted 27 June 2005, para. 115.

[1028] *Ibid*.

[1029] Japan-Restrictions on imports of certain agricultural products, Report of the Panel adopted on 2 Feb. 1988 (L/6253 - 35S/163), BISD 35S/163, 229. https://www.wto.org/english/tratop_e/dispu_e/86agricl.pdf ; Bernard M. Hoekman and Patrick Low, "State Trading: Rule Making Alternatives for Entities with Exclusive Rights," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 327-344 (University of Michigan Press, 1998), 327.

[1030] Hoekman and Low, *Ibid*.

the existence of market economies with enterprises making decisions based on commercial considerations without government directives.[1031] The assumption that POEs are the major players in the market cast some limitations on disciplining subsidies and monopolies or exclusive rights granted to SOEs, which were not given much attention at the time of negotiating the agreement. Currently, the rules of subsidies may be less than meaningful in an economy where state control is pervasive.[1032]

The limited effect of the rules also comes from changed circumstances after the conclusion of Uruguay Round negotiations, and the accession of China to the WTO. Other researchers have pointed out why China constitutes a new challenge for WTO law. They view China's unique economic structures (SASAC as a corporate holding for the state, state control of financial institutions, state control over planning and inputs, Chinese-style corporate groups and affiliated networks, Communist Party involvement and control, and the interconnected nature of private enterprises and the Party-State) as making it different from the other economic structures besides the market-oriented model considered in the Uruguay Round negotiations.[1033] China was not a party to the Uruguay Round negotiations. The reason that no more rules dealing with economic issues specific to China upon its accession to the WTO lies in first, the belief that China would converge along the lines of other economies, as had the countries of eastern Europe. The changed economic policies of China after its accession was beyond the expectations of China's trading partners. Many traits of the current economic structure of China were not yet in place upon China's accession to the WTO in 2001. It was not until the Hu-Wen administration beginning in 2003 that the new elements of today's China started. For instance, SASACs were established in 2003.[1034] In

[1031] William J. Davey, "Article XVII GATT: An Overview" in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 17-36 (University of Michigan Press, 1998), 21.
[1032] *Id*., at 22.
[1033] The global trading system has contemplated the possibility of a member's economic structure other than a market-oriented structure. Uruguay Round negotiators foresaw the possibility of four alternative economic structures, which are composed of command economy, transition economy, corporatism economy, and integrated conglomerate-led structure. For more about what the four alternative economic structures precisely are, *see* Mark Wu, "The 'China, Inc.' Challenge to Global Trade Governance," 57 *Harvard International Law Journal* (May 13, 2016).
[1034] Mark Wu, "The 'China, Inc.' Challenge to Global Trade Governance," 57 *Harvard International Law Journal* (May 13, 2016).

the Uruguay Round negotiations, some members' drafts dealt with SOEs and related issues.[1035] However, they encountered opposition from countries with many SOEs, and the countries that do not have many SOEs didn't pay much attention to this issue given that SOEs were not active in global markets and hence didn't cause concerns for the international community. In contrast, the TPP negotiations were conducted in times when SOEs were more prevalent and the problem had become a large concern. As for the Doha Round negotiations, the mandate of which was already set in 2001, at which time the problems of SOEs were not as severe as opposed to ten years later. Hence, the WTO members haven't made proposals on SOEs receiving advantages in the Doha Round negotiations.

The fact that the WTO has not to date dealt comprehensively with the problems of SOEs does not mean that it could not do so. There is discourse about whether the WTO law is more comparable to a contract (between) parties or to a constitution (of a community).[1036] The contract argument emphasizes the historical intent of parties in concluding agreements, while the constitutional argument gives much more attention to the present community leading to creative interpretation. I would like to combine these two schools, respecting the intents of parties, but acknowledging changed circumstances, and hence a need for new negotiations among Members arises. It would be acceptable for both schools to negotiate new rules based on changed circumstances, and at least to consider members' willingness.

Furthermore, these proposals in Chapter four concern regulation of grants of financial advantages, monopolies and exclusive and regulatory advantages to SOEs, as well as behavior of SOEs, falling into different subjects of rules, such as trade remedies rules, trade rules and competition rules. The WTO usually regulates trade policies as supposed to industrial policies, such as domestic subsidies, production monopolies, exploration exclusive rights, domestic competition law and its enforcement, etc. Industrial policies may or may not be within the WTO jurisdiction based on

[1035] Stephen Woolcock, International Competition Policy and the World Trade Organization, Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, pp. 12-18. http://www.lse.ac.uk/internationalRelations/centresandunits/ITPU/docs/woolcockintcomppolicy.pdf

[1036] Luca Rubini, "The Age of Innocence-The Evolution of the Case-Law of the WTO Dispute Settlement: Subsidies as A Case-Study", Robert Schuman Centre for Advanced Studies Global Governance Programme-222, European University Institute Working Papers RSCAS 2016/33, p. 2; Robert Howse and Kalypso Nicolaidis, "Enhancing WTO Legitimacy: Constitutionalization or Global Subsidiarity?" 16(1) *Governance* (Jan. 2003): 73-94.

different views regarding the objectives of the WTO and its mandates. According to the view that the WTO is only to reduce trade barriers and protect market access concessions, industrial polices may not be reached by the WTO unless trade is affected. According to the view that the WTO is designed to increase the overall welfare, and to promote free trade, industrial policies can be reached by the WTO. According to the school of thought that views the WTO agreement as a global economic constitution,[1037] industrial policies can be legitimately reached by the WTO. In contrast, some scholars argue that the legitimacy of the multilateral trading order requires greater democratic contestability.[1038] This view foresees more limited WTO rules, but does not necessarily rule out rules on SOEs.

Regarding the subject matter in general, can WTO reach SOEs directly? There are three approaches. One is that SOEs' behavior is regulated to the extent that they are granted advantages. The other is that SOEs' behavior is regulated to the extent that they undermine WTO members' obligations for the purpose of preventing circumvention. Another one is that SOEs are regulated due to their state ownership. My proposals are either based on anti-circumvention, or on the fact that SOEs are granted advantages. This is because first, the WTO's legitimacy in expanding its subject matter to cover SOEs lies in the purpose of preventing circumvention of WTO rules, i.e., governments should not be able to escape their obligations by having SOEs. Second, the mere fact of state ownership does not constitute the ground for my proposals. This is primarily due to the philosophy that the WTO is neutral as to economic models chosen by each member, and the WTO has been ownership-neutral. However, the WTO rules were designed with the assumption of a market economy, in which prices are determined by demand and supply, with little governmental interferences.[1039] SOEs are allowed to exist as long as SOEs also behave like POEs in markets without interference of governments, i.e., market players only take into account commercial considerations. Giving advantages to SOEs means that there is much governmental interference,

[1037] Constitutionalism viewpoint of the WTO stands that a constitutionalized WTO attempts to place economic freedom above politics. *See* Ernst-Ulrich Petersmann, "Trade Policy as a Constitutional Problem: On the Domestic Policy Functions of International Rules," 41 *Aussenwirtschaft* (1996): 405-39.

[1038] Robert Howse and Kalypso Nicolaidis, "Enhancing WTO Legitimacy: Constitutionalization or Global Subsidiarity?" 16(1) *Governance* (Jan. 2003): 73-94.

[1039] Some Members made commitments to transit to a market economy upon their concessions to the WTO or are required by other rules in the WTO agreements. For instance, transformation to a market economy is articulated in Article 29 of the SCM Agreement, which provides special transition rules for Members in the process of transforming from a centrally-planned economy to a market economy.

affecting ultimately prices, including domestic prices and world prices, and altering the competition relationship between SOEs and their competitors. Therefore, disciplining advantages granted to SOEs per se and the behavior of SOEs that have been granted such advantages does not go against the ownership-neutrality philosophy of the WTO.

With regard to the question of WTO's legitimacy in having competition policies, divergent positions emerge regarding the compatibility of competition policies with trade policies within the WTO, in terms of their respective objectives,[1040] principles, specific rules and concepts and limitations regarding the WTO's capacity of global governance.[1041] I believe strong arguments support the WTO's adoption of competition rules in relation to SOEs. First, both trade policy and competition policy are instruments of promoting economic and social development.[1042] Second, due to the concern that trade liberalization of public restraints on trade may be replaced by private restraints on trade, particularly hard-core cartels and other anti-competitive behavior,[1043] adopting competition rules to prevent that fits into the WTO's objective of trade liberalization. Third, nowadays, "most anti-competitive practice that raise prices and reduce output, involve the supply of intermediate products purchased by other businesses, rather than goods purchased by final consumers."[1044] Hence, competition issues are more related to producers rather to consumers.

These arguments are even more convincing in the context of SOEs. First, the risk of SOEs' anti-competitive practices that could impact adversely on international trade and largely replace

[1040] Thera are three various versions of general objectives of the WTO. Bagwell and Staiger, focusing on efficiency, thinks that the purpose of WTO rules is to facilitate internationally efficient outcomes through negotiated improvements in market access, consistent with states' domestically efficient outcomes. Ernst-Ulrich Petersmann views the notion of WTO as a global economic constitution, a charter of rights for a free and fair competition in world market. One position views WTO rules serve to entrench a view of what are good domestic public policies and tie the hands of governments in their choice of polices, despite demands of domestic interest groups.

[1041] Julia Ya Qin, "Pushing the Limits of Global Governance: Trading Rights, Censorship, and WTO Jurisprudence – A Commentary on the China-Publications," 10 *Chinese Journal of International Law* (2011).

[1042] WTO Working Group on the Interaction between Trade and Competition Policy, *Synthesis Paper on the Relationship of Trade and Competition Policy to Development and Economic Growth: Note by the Secretariat*, WT/WGTCP/W/80, Sep. 18, 1998, para. 31; WTO, *Report (1998) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/2, 8 Dec. 1998, para. 34.

[1043] WTO, *Report (1998) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/2, 8 Dec. 1998, paras. 35 and 137.

[1044] WTO, *Report (1998) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/2, 8 Dec. 1998, para. 36.

governmental restraints, has been enhanced.[1045] Second, the nature of disciplining SOEs receiving advantages and their behavior to that extent, is different from the nature of disciplining the behavior of POEs, given that SOEs are in the middle between public/governmental restraints on trade and private restraints on trade. Hence, competition rules in relation to SOEs are not solely rules in relation to private restraints on trade. This responds better to the argument that time would be better spent removing the remaining public restraints on trade in the WTO rather than private restraints. It has been pointed out public distortions to competition take various forms, such as subsidies and the cross-subsidization of competitive market activities through rents from public monopolies.[1046]

In summary, the WTO is an appropriate forum to implement the proposals made in Chapter four. Although the WTO system recognizes different types of national economic systems, and is ownership neutral, my proposals do not go against WTO's philosophy. The deficiencies of current WTO rules to address the problems identified in this dissertation partially result from limited purposes of these rules, such as rules on subsidies and state trading, i.e., to prevent circumvention of commitments already made in the WTO; from one of the assumptions on which the WTO rules are based, i.e., market economies that POEs are the major players in the market. My proposals are either based on anti-circumvention, or on the fact that SOEs are granted advantages. Hence, the WTO is legitimacy in expanding its subject matter to cover SOEs for the purpose of preventing circumvention of WTO rules, i.e., governments should not be able to escape their obligations by having SOEs. Second, the mere fact of state ownership does not constitute the ground for my proposals. Last, the WTO's legitimacy is not put in question by having competition policies, and there are strong arguments supporting the WTO's adoption of competition rules in relation to SOEs.

[1045] WTO, *Report (1998) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/2, 8 Dec. 1998, para. 31.
[1046] Stephen Woolcock, International Competition Policy and the World Trade Organization, Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, pp. 9-10.

6.1.2 Deficiency and Political Difficulties of Other Fora

There are other fora outside the WTO that might be used to address the problems I have found. At the regional level, for instance, the EU has a practice of embodying into its BITs and FTAs competition rules modeled on the EU's rules regarding restrictive business practice, state aids and public enterprises.[1047] This could happen for BITs and FTAs between China and other developing countries, given that many developing countries have started to be concerned with the problem caused by SOEs.[1048] However, BITs are less likely to address the problems given that many BITs in fact do not mention SOEs.[1049] This is the case for BITs negotiated between China and other countries. The reasons might be that, first, the SOEs issue is a top priority that cannot be compromised by some countries with significant presence of SOEs, such as China, which is tough on this matter. Hence, the other country may not be able to put pressure on China in negotiating BITs about SOEs and advantages. Second, China is a large economy or trader with a large market, and hence has more leverage over economies smaller than it. The economies smaller than China would prefer having access to the Chinese market in the negotiations of BITs and FTAs, and hence, are less likely to push on agenda items including SOEs. These reasons can partially account for why there is no BIT between China and the U.S. right now.

Moreover, competition rules in RTAs and BITs generally do not address the SOEs problem. Although one-third of BITs and FTAs contain provisions related to competition policy,[1050] the

[1047] *See* Tomas Baert, "The Euro-Mediterranean Agreements" in Gary Sampson and Stephen Woolcock (eds.), *Regionalism, Multilateralism, and Economic Integration: The Recent Experience* (Japan: The United Nations University Press, 2003).

[1048] The OECD (2006) analyzed 86 trade agreements that include competition-related provisions, and found that about two-thirds were between developing countries (often referred to as South-South agreements). *See* Gary Clyde Hufbauer and Jisun Kim, "International Competition Policy and the WTO", Paper presented at a conference titled One Year Later: The Antitrust Modernization Commission's Report and the Challenges that Await Antitrust, New York University, Peterson Institute for International Economics, 11 April 2008. https://piie.com/commentary/speeches-papers/international-competition-policy-and-wto

[1049] Some BITs, such as the chapter 12 of U.S.-Singapore Free Trade Agreement, have rules regarding SOEs while others do not, such as the Indonesia - Russian Federation BIT (2007).

[1050] UNCTAD, United Nations Conference on Trade and Development: Bilateral Investment Treaties:1995-2006: Trends in Investment Rulemaking (United State, New York and Geneva, 2007), 66-67; 100 out of the 300-odd BITs and FTAs, particularly those BITs entered by the U.S. and EU, have competition rules. The primary reason is to prevent circumvention. *See* Tomas Baert, "The Euro-Mediterranean Agreements" in Gary Sampson and Stephen Woolcock (eds.), *Regionalism, Multilateralism, and Economic Integration: The Recent Experience* (Japan: The United Nations University Press, 2003).

effect of most such provisions is quite limited.[1051] The member coverage is limited, the contents of competition provisions are limited, and most importantly, the competition provisions in many BITs and FTAs are non-binding.[1052] First, competition provisions in RTAs often concern cooperation between competition authorities, rather than harmonization of competition policies.[1053] SOEs and subsidies issues are carved out in most RTAs.[1054] Before 2009, RTAs have few provisions regarding SOEs or state aid, except for RTAs entered by EU that have state aid provisions. In light of China's economy and Chinese SOEs, more provisions in RTAs in this regard are found after 2009. Second, these provisions in RTAs are more of soft law, and there are no hard rules on SOEs apart from transparency and cooperation.[1055] For instance, the Japan-Korea BIT is more cooperation based rather than rule based. NAFTA excludes the competition chapter from its dispute settlement mechanism.

The proposed TPP Agreement is different in that it contains detailed provisions on SOEs. However, given that the U.S. withdrew from the TPP and the fact that China was not a party to the TPP negotiations, it seems unlikely that China would agree to the SOE rules in the TPP, either by joining it or accepting the rules in other FTAs. This is especially true given that in negotiating FTAs with one or a few other countries, China will likely have the upper hand in the negotiations.

Other fora, like the OECD, the G20, Asia-Pacific Economic Cooperation (APEC), etc., are not capable of addressing the problems I have identified. The OECD conference on Paris discussed about overcapacity, and called on governments to reduce overcapacity, which is closely related to giving various advantages to Chinese SOEs. At the G20, which serves as a global forum on steel excess capacity, it discussed the issue of steel overcapacity from both economic and political

[1051] Stephen Woolcock, International Competition Policy and the World Trade Organization, Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, pp. 1 and 18-26.
[1052] Except for competition laws in the European Union and ASEAN. *See* Clyde Hufbauer and Jisun Kim, "International Competition Policy and the WTO", Paper presented at a conference titled One Year Later: The Antitrust Modernization Commission's Report and the Challenges that Await Antitrust, New York University, Peterson Institute for International Economics, 11 Apr. 2008. https://piie.com/commentary/speeches-papers/international-competition-policy-and-wto ; Article 1501 of NAFTA.
[1053] Such as the TPP Agreement, the Japan-Viet Nam BIT (2003) and the Republic of Korea-Viet Nam BIT (2003).
[1054] The U.S.-Singapore Free Trade Agreement has provisions regarding SOEs. In practice, if there is a monopoly in one sector, the monopoly usually lobbies for the carved-out specific sector/exceptions from such BITs/FTAs in the applicability of competition provisions.
[1055] The U.S. and Australia have RTAs mentioning SOEs.

perspectives, and countries agreed to take actions to address this issue. It also raised the awareness of the overcapacity issue in SCM Agreement negotiations. It will report annually to the G20 ministers within its three-year renewable mandate.[1056] However, the G20 is not a negotiating forum, nor a decision-making forum, nor a law-making forum. Almost every issue can be discussed at APEC since it only adopts soft law. However, the issue of SOEs and their advantages have not been raised and discussed so far due to sensitiveness, encountering opposition from countries with significant presence of SOEs and with close relationship between governments and enterprises, such as China, Korea, other Asian countries.[1057] Nevertheless, monopolies can be discussed in APEC, as well as other issues relating to definitions.[1058] It may be expected that later on, the issue of SOEs and advantages may be discussed following the issue of monopolies. However, competition policies in the OECD, UNCTAD, ICC, ICN, etc.,[1059] are usually non-binding and have few substantive provisions. The OECD has made recommendations in this regard as early as 1967, and revised it subsequently.[1060] However, they are non-binding, and only provide models for countries to adopt in bilateral agreements, and most provisions are on procedural and cooperation issues.[1061] The UNCTAD Set[1062] was adopted in 1980 and contained few precise provisions

[1056] "Steel: Commission Welcomes New Global Forum to Tackle Root Causes of Overcapacity," European Commission, 16 Dec. 2016, Brussels, http://trade.ec.europa.eu/doclib/press/index.cfm?id=1607

[1057] For instance, governments have close relationship with some giant corporations. Some sensitive industries, like military sectors are operated by states.

[1058] E.g., the issue of climate change was covered and discussed at APEC at the very beginning around 1993. Later on, "APEC members are promoting trade in environmental goods—from solar panels to wind turbines—in the region by reducing tariff to 5 per cent or less by the end of 2015." *See* Asia-Pacific Economic Cooperation, "About APEC, Fact Sheets: Climate Change," 13 May 2015, available athttps://www.apec.org/About-Us/About-APEC/Fact-Sheets/Climate-Change ; It has impacts on the WTO. Currently, there is negotiation on environmental goods agreements at the WTO. The whole process took about 10 years. Such process may be resembled to deal with the issue of SOEs and advantages. *See* WTO, "Trade Topics: Environmental Goods Agreement," https://www.wto.org/english/tratop_e/envir_e/ega_e.htm (last visited 26 Sept. 2017).

[1059] OECD, *Competition Provisions in Regional Trade Agreements*, OECD Trade Policy Working Paper No. 31. COM/DAF/TD(2005)3/FINAL (Paris, 2006); UNCTAD (United Nations Conference on Trade and Development), *Competition Provisions in Regional Trade Agreements: How to Assure Development Gains* (New York: United Nations, 2005); ICN refers to the International Competition Network.

[1060] OECD, "Recommendation of the Council concerning Effective Action against Hard Core Cartels," C(98)35/FINALA, 25 March 1998; WTO, *Report (1998) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/2, 8 Dec. 1998, para. 71.

[1061] Stephen Woolcock, International Competition Policy and the World Trade Organization, Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, pp. 12-18.

[1062] UNCTAD, *The United Nations Set of Principles and Rules on Competition: UNCTAD Set of Multilaterally Agreed Equitable Principles and rules for the Control for Restrictive Business Practices*, TD/RBP/CONF/10/Rev.2 (Geneva, United Nations, 2000).

without binding commitments, but was rather an early model for drafting international and national competition policies.[1063]

At the national level, domestic competition laws may not be sufficient to address the problem for the following reasons: a) some countries, especially developing countries, may not have domestic competition laws and the capacity of enforcing domestic competition laws; b) there is jurisdictional limitation that domestic competition laws of one country may not reach the behavior of enterprise in another country; c) information is not always available especially regarding an enterprise outside of a country's territory; and d) there are different standards and policies in various domestic competition laws, leading to legal segmentation that one behavior is deemed to be problematic by one trading partner while not problematic by another trading partner, and voluntary cooperation is inadequate to deal with policy differences.[1064]

Summary

The WTO is an appropriate forum to implement the proposals made in Chapter 5. First, the WTO is legitimate in embracing such proposals. The deficiencies of current WTO rules to address the problems identified in this dissertation partially result from limited purposes of these rules, such as rules on subsidies and state trading. Rules drafted with WTO's philosophy and assumptions about market economies kept in mind, can hardly catch up with changed circumstances. Nevertheless, the WTO is capable of dealing with the problems of SOEs through respecting the intents of parties and acknowledging changed circumstances. The reach of WTO rules to SOEs doesn't go against the ownership neutrality philosophy of the WTO. Furthermore, the WTO's legitimacy is not put in question by having competition policies, and there are strong arguments supporting the WTO's adoption of competition rules in relation to SOEs.

[1063] It was an earlier effort by developing countries to get some control over potential RBPs of multinational companies. Stephen Woolcock, *supra* note 1061.

[1064] Although the effects doctrine can be invoked in theory, developing countries do not have the capacity, resources, and information against cartels which are organized abroad. *See* Gary Clyde Hufbauer and Jisun Kim, "International Competition Policy and the WTO", Paper presented at a conference titled One Year Later: The Antitrust Modernization Commission's Report and the Challenges that Await Antitrust, New York University, Peterson Institute for International Economics, 11 Apr. 2008.

On the other hand, other fora outside the WTO, such as BITs and FTAs, are not likely to succeed in addressing the problem of SOEs receiving various advantages due to political difficulties or the lack of participation by countries with significant presence of SOEs. Technically, competition rules in RTAs and BITs are not enough to address the problem due to their soft law effect nature and limited coverage. Although the proposed TPP Agreement does much on this subject, its influence and effects, however, remain to be seen. Other fora, like the OECD, the G20, APEC, etc., are neither sufficient due to the limited coverage, the use of soft law techniques and the limited functions of these fora. At the national level, domestic competition laws may not be sufficient to address the problem due to limited jurisdiction, limited resources, limited capacity and fragmentation of competition rules.

6.2 From the WTO's Legal Perspective

There are two kinds of legal techniques in the WTO can be used to modify existing rules as presently interpreted. One is through negotiation, amendment, ministerial conference decisions or general council decisions, and the other is through the dispute settlement mechanism. In practice, consensus is practiced for negotiations, amendment, ministerial conference decisions or general council decisions.

6.2.1 Negotiations

Negotiating new rules (i.e., competition rules) by WTO members requires, first, each WTO member agrees to initiate negotiations on competition rules, i.e., the agenda to negotiate on competition rules is agreed by WTO members by consensus. Otherwise, there will be only plurilateral negotiations, rather than multilateral negotiations. Second, to conclude an agreement on competition rules requires consent from all members. Otherwise, it is a plurilateral agreement. Third, the concluded agreement needs to be ratified by the domestic ratification process of each member, in order to enter into force for that member.

It is very difficult to reach consensus politically. There is unwillingness to conclude plurilateral agreements that do not included all significant members concerned with a subject. Thus, it should

be difficult to conclude a plurilateral agreement affecting SOEs unless the members with a significant presence of SOEs participate in the negotiations. Moreover, the usefulness of plurilateral agreements on competition rules without members which have significant presence of SOEs is in doubt.

6.2.2 Amendment

According to Article X of the Marrakesh Agreement Establishing the World Trade Organization, the amendment procedure for amending current trade remedies rules (SCM Agreement and Anti-Dumping Agreement), and other trade rules (such as GATT Article XVII about STEs, and Article VIII and XV of GATS about monopolies and exclusive service suppliers, and subsidies) shall go through two stages.[1065] The first step is to submit the proposed amendment to the Members for acceptance.[1066] Any member or the Council for Trade in Goods, or the Council for Trade in Services, may initiate a proposal to amend the above mentioned WTO rules. Consensus is needed in order for the Ministerial Conference to submit the proposed amendment to the members for acceptance, or the Ministerial Conference shall decide by a two-thirds majority of the members whether to submit the proposed amendment to the members for acceptance. The second step is to have two thirds of the members accept the proposed amendment regarding the abovementioned rules, in order to make the amendment take effect for the members that have accepted it.[1067] However, the amendment only takes effect for the members who accept it after acceptance by two thirds of members.

It is difficult to have consent from two-thirds of the members. The effect of an amendment would be discounted if the amendment doesn't bind the members with significant presence of SOEs, e.g., if these members do not give their consent.

[1065] Marrakesh Agreement Establishing the World Trade Organization, Article X.
[1066] *Id.*, para. 1.
[1067] *Id.*, paras. 3 and 5.

6.2.3 MC/GC Decisions

According to Article IX of the Marrakesh Agreement, decision-making in the WTO Ministerial Conferences and the General Council is by consensus in general. If consensus is not achieved, decisions of the Ministerial Conference and the General Council regarding, for instance, competition issues, trade remedies rules, and other trade rules (GATT Article XVII on STEs, and Article VIII and XV of GATS), can be taken by a majority of the votes cast.[1068] In practice, however, the MC and the GC do not vote; decisions have always been taken by consensus. But in theory, voting is possible.

In the case of adopting an interpretation of a Multilateral Trade Agreement in Annex 1(including all the above-mentioned WTO rules), a recommendation by the Council overseeing the functioning of that Agreement, for instance, the Council of Trade in Goods or the Council of Trade in Services, is needed. The decision to adopt an interpretation shall be taken by a three-fourth majority of the members.[1069] The interpretation adopted by Members pursuant to Article IX:2 of the WTO Marrakesh Agreement is binding on all Members, as held by the AB in *US-Clove Cigarettes* where it stated that "Multilateral interpretations adopted pursuant to Article IX:2 of the *WTO Agreement* have a pervasive legal effect. Such interpretations are binding on all Members…including in respect of all disputes in which these interpretations are relevant."[1070] Based on the word "shall" in Article IX:2 of the WTO Marrakesh Agreement, the AB considered that the recommendation from the relevant Council is an essential element.[1071]

The legal status of decisions made by WTO Ministerial Conferences and General Council have been disputed by parties in the dispute settlement mechanism. In the case of *US-Clove Cigarettes*, concerning one paragraph of the Doha Ministerial Decision,[1072] the Ministerial Conference

[1068] Marrakesh Agreement Establishing the World Trade Organization, Article IX, para. 1.
[1069] *Id*., para. 2.
[1070] Appellant Report, United-States-Measures Affecting the Production and Sale of Clove Cigarettes (US-Clove Cigarettes), WT/DS406/AB/R, 4 Apr. 2012, paras. 250 and 257.
[1071] *Id*., para. 254.
[1072] The relevant provision is the paragraph 5.2 of the Doha Ministerial Decision, which provides as follows: "Subject to the conditions specified in paragraph 12 of Article 2 of the Agreement on Technical Barriers to Trade, the phrase 'reasonable interval' shall be understood to mean normally a period of not less than 6 months, except when this would be ineffective in fulfilling the legitimate objectives pursued."

Decision at issue was not regarded as an interpretation within the meaning of Article IX (2) of the Marrakesh Agreement due to the absence of a recommendation from the relevant council. However, it can be, and was in the case at hand, deemed as a "subsequent agreement" within the meaning of Article 31(3)(a) of the Vienna Convention.[1073] However, the fact that the Doha Ministerial Decision at issue was reached by consensus cannot be ignored, and the word "shall" in the Ministerial Decision at issue was also noticed.[1074] In other words, the parties to the dispute gave their consent to the Ministerial Decision at issue. That's the key point that the MC Decision at issue could also be deemed as a "subsequent agreement" between parties to the dispute.

However, the legal effect of a Ministerial Decision is not clear if it is not reached by consensus, but rather by a majority of votes cast. First, a Ministerial Decision that is reached by a majority of votes cast is not an interpretation within the meaning of Article IX of the Marrakesh Agreement. Second, it is arguable whether it can be deemed as a "subsequent agreement" within the meaning of Article 31(3)(a) of the Vienna Convention, and it is not clear the role played by the factor that both parties to the dispute gave consent/votes to the Ministerial Decision previously. Article 31(3)(a) of the *Vienna Convention* is a rule of treaty interpretation, pursuant to which a treaty interpreter uses a subsequent agreement between the parties on the interpretation of a treaty provision as an interpretative tool to determine the meaning of that treaty provision. Pursuant to Article 3.2 of the DSU, panels and the Appellate Body are required to apply the customary rules of interpretation of public international law—including the rule embodied in Article31(3)(a) of the *Vienna Convention*—to clarify the existing provisions of the covered agreements. Interpretations developed by panels and the Appellate Body in the course of dispute settlement proceedings are binding only on the parties to a particular dispute. Article IX:2 of the *WTO Agreement* does not preclude panels and the Appellate Body from having recourse to a customary rule of interpretation of public international law that, pursuant to Article 3.2 of the DSU, they are required to apply.[1075] The "agreement" here doesn't require any specific form, but refers to substance rather than to form.[1076]

[1073] Appellant Report, United-States-Measures Affecting the Production and Sale of Clove Cigarettes (US-Clove Cigarettes), WT/DS406/AB/R, 4 Apr. 2012, paras. 255 and 257.
[1074] Panel Report, *US-Clove Cigarettes*, WT/DS406/R, 2 Sept. 2011, para. 7.575.
[1075] Appellant Report, United-States-Measures Affecting the Production and Sale of Clove Cigarettes (US-Clove Cigarettes), WT/DS406/AB/R, 4 Apr. 2012, para. 258.
[1076] *Id*., para. 267.

It is the same with the legal status of committee decisions. In the case of *US-Tuna II(Mexico)*, regarding the legal status of committee decisions, the AB held that the Committee Decision at issue was adopted by the TBT Committee, which comprises all WTO Members and that the Decision was adopted by consensus,[1077] and considered that the TBT Committee Decision can be considered as a "subsequent agreement" within the meaning of Article 31(3)(a) of the *Vienna Convention.* [1078] Once again, the fact that the Committee Decision at issue is reached by consensus by all WTO members, plays an essential role here. Indeed, committee procedures generally require consensus, thus, the legal effect is not clear in respect of a Committee decision that is not reached by consensus by all WTO members.

The uncertainty and ambiguity of the legal effects of decisions may be attractive for Members if they prefer soft legal effects particularly within the Dispute Settlement Mechanism to the extent that soft laws cannot be cited to support arguments in the Dispute Settlement Mechanism. In that sense, Members will be more acceptable to those proposals in Chapter four with uncertain and ambiguous legal effects, such as serving as relevant context, whether or not they can be deemed as a "subsequent agreement" within the meaning of Article 31(3)(a) of the Vienna Convention. Furthermore, Article IX of the Marrakesh Agreement cannot be used to get around the amendment procedure in Article X of the Marrakesh Agreement. Therefore, it is hard to have changes to current trade remedies rules, or other trade rules (GATT Article XVII about STEs, and Article VIII and XV of GATS). It might be easier to some extent to have Ministerial Conference Decisions or General Council decisions with respect to competition issues, although probably only at a rather general level. However, stand-along ministerial decisions may not be cited in WTO dispute settlement. Where ministerial decisions have been used in dispute settlement, it has been to interpret existing agreements. It is because the DSU provides in Article 1.1 that it applies to "covered agreements", a term that does not seem to include stand-along ministerial decisions.

[1077] AB Report, United States-Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products, WT/DS381, 16 May 2012, para. 371.
[1078] *Id*., para. 372.

6.2.4 The Dispute Settlement Mechanism

With respect to the dispute settlement mechanism, parties may argue that specific existing rules should be pushed to their limits. This could lead to a liberal interpretation of the rules by panels and the AB.

This is possible because there is discretion derived from ambiguities and general terms unexplained by the drafters in the negotiating history. Tracing back to the history, the DSB was "created when many WTO Agreements were already at an advanced stage of the final drafting".[1079] These Agreements had been negotiated with the GATT dispute settlement in mind, which was a system with much less power.[1080] Therefore, some ambiguities were created by negotiators deliberately. They believed that no interpretation which had not been agreed by them could be imposed on them.[1081] Had the negotiators known that their agreements would be submitted to as a legalistic system such as the present WTO dispute settlement, the Uruguay Round would not have been concluded, or ambiguities and general terms would have been clarified.[1082]

An aggressive interpretation by the panels and AB can also be achieved through defining rules for interpretation. In the EU model, the European Union Court defines its own approach to legal interpretation, and emphasizes context and purpose, the so-called "judicial activism" model. The jurisprudence of the ECJ has developed the interpretation of relevant rules such as "state aid that distorts competition among Member States."[1083] The interpretation principle in the WTO is the same as that in the EU since it is for the AB to define rules for interpretation.[1084] Currently, the AB in the WTO focuses more on text as compared to context and purpose. It is possible for them to switch the focus to emphasize the purposes of the treaty, i.e., towards more liberal

[1079] Michel Cartland, Gerard Depayre and Jan Woznowskl, "Is Something Going Wrong in the WTO Dispute Settlement?" 46 *J. World Trade* 979 (2012), 986.
[1080] *Ibid*.
[1081] *Ibid*.
[1082] *Ibid*.
[1083] Alan Sykes, "The Questionable Case for Subsidies Regulation: A Comparative Perspective," Law and Economics Research Paper Series Paper No. 380.
[1084] Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), 13.

interpretation.[1085] On the one hand, it is fair to say that identification of the treaty object and purpose may be difficult, especially in the case of multilateral conventions, like the WTO, which have more than one purpose, and these may be in conflict with each other. On the other hand, it provides more discretion for DSB. Although there is a limitation imposed by Articles 3.2 and 17.6 of DSU, which disallows adding to rights or obligations for Members by DSB, Members can do nothing to stop DSB from activism, or to reduce the discretion of DSB unless Members change and make more explicit relevant DSU provisions, which seems to be impossible in practice.[1086] In addition, there is nothing like formal *stare decisis* in the WTO.[1087]

However, it must be admitted that there are limitations on liberal judicial activism.[1088] With regard to the possibility of liberal or aggressive interpretation by panels, the decisions of panels risk being reversed by the AB. With respect to the possibility of liberal or aggressive interpretation by the AB, first, the AB is supposed to interpret the law, rather than creating the law. Second, politically speaking, members do not like to give much power to the AB. Members believe that treaty-making power shall be exclusively in the hands of members by the means of negotiations.[1089] Third, AB members are aware that they serve limited terms and that WTO Members can ultimately "rein in" the AB through their appointment power. Therefore, it is less likely that the AB will go much beyond the legal texts. It is particularly true for the trade rules proposals. This is because the AB is less likely to adopt liberal interpretations of GATT Article XVII given that WTO Members already have positions and views about how Article XVII should be applied and the interpretative space is limited in this regard, while some proposals in the trade rules approach will actually alter members' rights and obligations, such as the expansion of coverage of Article XVII to SOEs. As to the trade remedies proposals, it might be possible that AB, especially if membership of the AB changes, may adopt different interpretations in the future that are more in line with my proposals.

[1085] Mark Wu, "The 'China, Inc.' Challenge to Global Trade Governance," 57 *Harvard International Law Journal* (May 13, 2016): 48-50.
[1086] "The DSB will never reach a consensus to stop these practices, because they will always be seen from different angles as compared to those who are adversely affected and those who benefit from a particular outcome." *See* Michel Cartland, Gerard Depayre and Jan Woznowskl, "Is Something Going Wrong in the WTO Dispute Settlement?" 46 *J. World Trade* 979 (2012), 991.
[1087] Michel Cartland, Gerard Depayre and Jan Woznowskl, "Is Something Going Wrong in the WTO Dispute Settlement?" 46 *J. World Trade* (2012): 979, 991.
[1088] Mark Wu, "The 'China, Inc.' Challenge to Global Trade Governance," 57 *Harvard International Law Journal* (May 13, 2016): 48-50.
[1089] My interviews with delegates of WTO Members, Dec. 2016.

This is because current rulings about some provisions of the SCM Agreement, such as the definition of "public body", have been criticized and considered contrary to the WTO Agreement by some important WTO Members. However, to date the AB has never significantly altered its past decisions.

Summary

There are several legal techniques that can be utilized within the WTO to implement these proposals, such as negotiations, amendment, ministerial conference decisions or general council decisions and the dispute settlement mechanism. Although voting is possible, in practice, consensus is practiced for negotiation, amendment, ministerial conference decisions or general council decisions. Negotiations require consent from all members; an amendment requires consent from two-thirds of members. Negotiated rules apply to all members when accepted; an amendment only takes effect for the members who accept it. The legal effects of Ministerial Conference decisions or General Council decisions are not always clear. Although judicial activism can be utilized within the dispute settlement mechanism, legal effects are limited to the particular case. Furthermore, there are limitations on liberal judicial activism due to members' sensitivity about treaty-making power.

6.3 From WTO Members' Political Perspective

This section will analyze WTO members' political willingness in respect of the trade remedies proposals, i.e., improving the SCM Agreement; the trade rules proposals, i.e., improving GATT Article XVII; and the competition rules proposals. Political difficulties will be laid out, as well as efforts that have been made, and the likelihood of members' giving consent will be considered. In terms of the competition rules approach, I suggest "trade-offs" can be used, particularly for China, as well as other members. Lastly, the possibility of embracing the competition rules approach will be analyzed, and a proposed framework will be put forth.

6.3.1 Trade Remedies Approach

GATT Article XVI (5) on subsidies provides that "The CONTRACTING PARTIES shall review the operation of the provisions of this Article from time to time with a view to examining its effectiveness, in the light of actual experience, in promoting the objectives of this Agreement and avoiding subsidization seriously prejudicial to the trade or interests of contracting parties." GATS Article XV prescribes negotiation obligations for Members to develop multilateral disciplines to avoid trade-distortive effects of subsidies.[1090] The Working Party on GATS Rules carries out negotiations on subsidies in the GATS.[1091]

However, the difficulty of negotiating or amending the SCM Agreement, such as by changing the definition of "public bodies" can be explained as follows. First, the definition of "public bodies" in the SCM Agreement is probably intended to be ambiguous by its drafters as a result of compromise. This ambiguity both creates discretion for subsidizing members and members imposing CVDs. Given the lack of a preamble in the SCM Agreement, WTO jurisprudence views that the objective of the SCM Agreement is to keep a balance between subsidizing countries and countries imposing CVDs.[1092] Specifically, it is the balance between substantive provisions regarding the grants of subsidies and the procedural provisions regarding the use of CVDs. Hence, any negotiation on substantive provisions on subsidies will trigger negotiation on the procedural use of CVDs. Such negotiations would not be welcomed by members, such as the U.S., who wants to preserve the right to use CVDs as trade defenses, and hence are opposed negotiations or amendment on the provisions regarding the use of CVDs. Furthermore, some members would like to link negotiations on the SCM Agreement with negotiations on the Anti-Dumping Agreement, making it more different to negotiate on one specific issue. Some members, like the U.S., are not

[1090] Article XV of GATT.

[1091] The Working Party on GATS Rules was established in1995 by the Council for Trade in Services. *See* WTO Council for Trade in Services, Report of the Meeting Held on 30 March 1995: Note by the Secretariat, S/C/M/2, 29 Apr. 1995, paras. 23-25; *See also* the Reports of the Working Party on GATS Rules to the Council for Trade in Services, S/WPGR/1-21; *See also* WTO Working Party on GATS Rules, Report of the Meeting Held on 24 Nov. 2010: Note by the Secretariat, S/WPGR/M/71, 11 Feb. 2011.

[1092] There are critics of the AB's invention of a preamble to the SCM Agreement, arguing that the drafters specifically decided that it would be impossible to agree on these matters and that therefore, the SCM Agreement shall have no preamble or any identification of its object and purpose. How then can the AB not only invent such a preamble but also use it as one of its interpretative tools? *See* Michel Cartland, Gerard Depayre and Jan Woznowskl, "Is Something Going Wrong in the WTO Dispute Settlement?" 46 *J. World Trade* (2012): 979, 992-3.

willing to negotiate on Anti-Dumping Agreement.[1093] Last, the definition of public bodies or the scope of subsidies are essentially a question of how much policy space can be reserved for members. The negotiation on this regard will trigger the discourse on how to draw a line for policy space, which is hard due to conceptual differences. It is hard to have disciplines on domestic support, which will come across opposition both from developed and developing members, such as the U.S., China, India and so on.

Currently, no substantive proposals on the SCM Agreement have been put forth by members, except for some proposals regarding procedural issues.[1094] The U.S. once proposed to have notifications regarding ownership of an enterprise by a government or public body, i.e., only some notification provisions specific to SOEs.[1095] Right before the 10th Ministerial Conference, the EU proposed that non-notified subsidies should be presumed as automatically in breach of WTO disciplines and therefore actionable under the provisions of SCM Agreement.[1096] However, it encountered opposition from developing countries concerned with the capacity to notify. Therefore, amending current trade remedies rules seems not likely to occur.

6.3.2 Trade Rules Approach

The trade rules approach primarily includes modifying GATT Article XVII, such as expanding the coverage of Article XVII and adding to it behavior type regulations.

Historically, with respect to regulation of the behavior of SOEs that have been granted monopolies or exclusive rights, attention was more paid to the area of service. In the area of services, there was much greater concern about monopoly control over essential facilities, particularly as to telecom

[1093] Stephen Woolcock, International Competition Policy and the World Trade Organization, Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, p. 6.
[1094] The Doha negotiation on subsidies and countervailing measures is mainly focused on developing countries and least developed countries. *See* WTO Ministerial Conference Fourth Session, Doha, 9-14 Nov. 2001, *Implementation-Related Issues and Concerns: Decision of 14 November 2001*, WT/MIN(01)/17, 14 Nov. 2001, para. 10.
[1095] WTO Negotiating Group on Rules, *Proposal from the United States, Expanding the Prohibited "Red Light" Subsidy Category Draft Text*, TN/RL/GEN/146, 5 June 2007, p. 3.
[1096] WTO Negotiating Group on Rules, *Communication from The European Union, Rules Negotiations-Transparency*, TN/RL/W/260, 16 July 2015, p. 2.

and transport networks and terminals.[1097] Accordingly, the WTO Reference Paper contains regulatory principles applicable to liberalized trade in basic telecommunications stating that "appropriate measures shall be maintained" to prevent three kinds of anti-competitive practices, including anti-competitive cross-subsidization.[1098] In contrast, in the area of trade in goods, rules regulating the behavior of STEs, although established in GATT, played a minor role in practice, in large part because the main sectors or countries where STEs are prevalent were excluded from 1947 GATT, like agriculture, services, and centrally-planned economies.[1099]

Currently, regarding behavior of exporting STEs, regulation of their behavior has been discussed in negotiations. This is because the number of exporting STEs has declined since Canada and Australia have limited their use of STEs,[1100] the opposition to negotiate on exporting STEs from members with exporting STEs is reduced. Negotiations on agriculture may touch on the issue of STEs, especially exporting STEs. However, members primarily focus on the effects of the problems, rather than the problems per se. For instance, touching on the existence of STEs per se is rare at the WTO, except for one proposal to eliminate the agricultural export monopoly powers.[1101] After 2011, negotiations have focused on specific issues. The 10th Ministerial Conference in Nairobi dealt with export competition, including behavior regulations, financing, and subsidies, rather than eliminating monopolies.[1102] With regard to importing state trading

[1097] Aaditya Mattoo, "Dealing with Monopolies and State Enterprises: WTO rules for Goods and Services," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 37-70 (University of Michigan Press, 1998), 37.
[1098] WTO Negotiating Group on Basic Telecommunications, *Telecommunications services: Reference Paper*, 24 Apr. 1996, Articles 1.1 and 1.2.
[1099] Bernard M. Hoekman and Patrick Low, "State Trading: Rule Making Alternatives for Entities with Exclusive Rights," in *State Trading in the Twenty-First Century*, eds., Thomas Cottier and Petros C. Mavroidis, Studies in International Economics, The World Trade Forum Volume 1, 327-344 (University of Michigan Press, 1998), 327.
[1100] For instance, Canada has ended the Canadian Wheat Board's marketing monopoly for Western Canadian wheat and barley as of 1 August 2012. *See* WTO Working Group on State Trading, *New and Full Notification Pursuant to Article XVII:4(a) of the GATT 1994 and Paragraph 1 of the Understanding on the Interpretation of Article Xvii from Canada*, G/STR/N/16/CAN, 22 July 2016, p. 12; Currently, there are no statutory restrictions on the export of rice grown in other Australian states other than the New Wales State, which has the Rice Marketing Board for the State of New South Wales to award an authorized buyer with the exclusive, or non-exclusive, right to export rice grown in the State of New South Wales. *See* WTO Working Group on State Trading, *New and Full Notification Pursuant to Article XVII:4(a) of the GATT 1994 and Paragraph 1 of the Understanding on the Interpretation of Article Xvii from Australia*, G/STR/N/16/AUS, 29 July 2016, p. 2.
[1101] WTO Committee on Agriculture Special Session, Revised Draft Modalities for Agriculture, TN/AG/W/4/Rev.4, 6 Dec. 2008, Annex K, p. 69, Article 3(a)(iv) provides "Members shall eliminate, by 2013, the use of agricultural export monopoly powers for such enterprises."
[1102] Tenth WTO Ministerial Conference, *Export Competition*, Ministerial Decision of 19 December 2015, WT/MIN(15)/45 — WT/L/980, Nairobi, 2015.

enterprises, it is primarily discussed in the context of tariff-quota restrictions, such as when STEs control the management and administration of a tariff-quota, impeding imports.[1103] Other behavior of importing STEs is not discussed, such as the mark-up prices. The issue of importing STEs is usually associated with domestic support at the negotiation table.

In a nutshell, although several proposals from Members regarding STEs have been put forth in the Doha Round Negotiations,[1104] amending or negotiating current trade rules about monopolies, such as GATT Article XVII, is less likely in terms of regulating behavior of SOEs that have been granted monopolies or exclusive rights. Even the proposal to start a discussion in Working Party on STEs on the adequacy of the current WTO disciplines on state trading encountered opposition.[1105] Currently, there are no negotiations on the behavior of SOEs, nor the existence of monopolies or exclusive rights granted to SOEs. It is largely because members want to have policy space reserved for allowing to grant monopolies or exclusive rights to SOEs. In agricultural area, the current negotiations focus on the privileges granted to STEs/SOEs, rather than the existence of SOEs per se nor the behavior of SOEs. In addition, the function of Working Party on STEs is limited due to its limited number of meetings commenced, and hence, is less likely to serve as a negotiation forum.[1106]

6.3.3 The Balanced Competition Rules Approach

With respect to the competition law approach, I suggest a balanced method. In order to implement the competition rules proposals, some other issues can be traded off for the purpose of obtaining

[1103] WTO Ministerial Conference Ninth Session, *Understanding on Tariff Rate Quota Administration Provisions of Agricultural Products, as Defined in Article 2 of the Agreement on Agriculture*, Ministerial Decision of 7 Dec 2013, WT/MIN(13)/39, WT/L/914, Bali, 11 Dec. 2013.
[1104] Steve McCorriston and Donald Maclaren, "Trade and Welfare Effects of State Trading Enterprises", Paper prepared for presentation at the XIth Congress of the EAAE (European Association of Agricultural Economists), The Future of Rural Europe in the Global Agri-Food System, Copenhagen, Denmark, (Aug. 24-27, 2005), 3.
[1105] Report (1996) of the Working Party on State Trading Enterprises, G/L/128, adopted 28 Oct. 1996; The European Communities submitted a paper outlining suggestions for future work to be undertaken by the Working Party on State-Trading Enterprises, including an examination of whether Article XVII and the Understanding needed further strengthening. It was explained that the intent of the paper was not to renegotiate Article XVII. *See* WTO Working Party on State Trading Enterprises, *Working Party on State Trading Enterprises: submission by the European Community*, G/STR/W/33, 4 Oct. 1996.
[1106] The Working Party on State Trading Enterprises only has regular meetings, i.e., twice a year. *See* WTO, Trade Topics: State Trading, Working Party Meetings 2016 and 2017, available at https://www.wto.org/english/tratop_e/statra_e/statra_e.htm (last visited 27 Sept. 2017)

members' consent in this regard. Among many things, one of them is the investment issue involving SOEs. I haven't mentioned the element of "investment review" so far, and I will explain in detail why this element can be traded off in the following section. Afterwards, I will analyze China's position on accepting some arrangement of trade-offs in order to be willing to accommodate the competition rules proposals. Other members' political willingness will also be examined. Two elements can be embodied and discussed. One is the specific provisions relating to SOEs receiving advantages in balance with investment review, and the other is the competition rules element. Each element will be analyzed from the political perspective.

(1) Trade-offs

In order to achieve the competition rules proposals regarding SOEs disciplines, there are many issues can be taken into account for trade-offs, such as market access issues, investment issues, etc. I picked the element of "investment review" in particular for the balance between the element of specific provisions relating to SOEs receiving advantages and investment review relating to SOEs, and will elaborate it later in detail.

Before going to the analysis of political willingness of each member, the issue of trade-offs needs to be discussed in the first place. One reason why it is difficult to achieve the trade remedies approach and the trade rules approach is because negotiations on trade remedies or trade rules are more likely to be merit based without linkage to other issues and linkage is often strongly opposed by members. The WTO is a member driven system, and the practice is consensus regardless of legal provisions providing the possibility of majority voting decisions. China, as well as other members with significant presence of SOEs, plays a significant role in the WTO nowadays. Hence, it is difficult to have consent from them per se.

The idea of trade-offs through negotiations might be possible in practice in light of changed circumstances, taking into the willingness of each member or a group of members. My proposal concerning trade-offs is not the same as the Uruguay Round single package deal. It was much easier to reach consensus at the end of the Uruguay Round negotiations since the single package deal facilitated the end of the negotiation. This was due to the smaller number of members, the fact that developing countries lacked understanding of GATT rules, and many Latin America,

African countries and developing countries were willing to keep in line with western countries. However, nowadays, industrialized developing countries have their own considerations and the number of WTO members is larger. It is more difficult to reach consensus nowadays, making a single package deal complex and difficult to proceed with. The Doha negotiations got stuck due to complexities of linkage. Therefore, members nowadays turn to focus on a specific issue without mentioning linkage. For instance, in the 10th Ministerial Conference, little linkage was done, and many issues were discussed based on their own merit, such as the export competition issue. For those non-Doha issues, a single package deal is less likely to be pursued nowadays. Currently, there are not many issues on the table, making it hard to have a single package deal.

Although the single package deal is less likely to take place, some trade-offs are possible. The public choice equilibrium holds that equilibrium in a political market shifts only if something changes, which take places only if someone wants it.[1107] The precondition of trade-offs in a package deal is that each party has something to offer and wants some benefits from others. Accordingly, the current political equilibrium has changed since some countries want to discipline the advantages granted to SOEs, particularly Chinese SOEs, which affect international trade significantly. Meanwhile, China and other countries with lots of SOEs receiving advantages want something else from other members. For instance, China wants to regain rapid economic growth and political strength by being more active in global markets. It might be possible to have competition elements disciplines with some provisions specific to SOEs, to be balanced with provisions regarding the screening and review of investments by SOEs, in a sense that the investment review shall take into account that SOEs have been subject to disciplines at the WTO.

a. From the perspective of China: Pressure faced by China

The idea of trade-offs can work for China and other members with a significant presence of SOEs. There are many complaints about Chinese SOEs, and Chinese SOEs also face many difficulties in international markets. Cost-benefit analysis needs to be applied. For instance, if the benefits obtaining from other issues/areas are less or much less than the benefits deriving from SOEs and

[1107] William Bishop, "From Trade to Tutelage: State Aid and Public Choice in the European Union," Presentation to Conference of ACE, Copenhagen, 2 Dec. 2005.

their advantages, little incentive for trade-offs can be found here. The extent of different pressure faced by China and other members with a significant presence of SOEs can be explained as follows.

The conflict of interest or competition between Chinese SOEs and SOEs from other countries, such as the United Arab Emirates, Russia, Indonesia, Malaysia, Saudi Arabia, India, Brazil, Norway, Thailand, etc. can be observed as follows. SOEs from different countries receiving advantages may be competitors and have conflicts of interest, and hence, those members with significant presence of SOEs may be willing to accept disciplines on SOEs and advantages. However, for instance, SOEs from Southeast Asia are primarily operating in domestic markets, and their impacts in international markets are much less than Chinese SOEs, in light of trade and FDI. Hence, SOEs from Southeast Asia are not competitors with Chinese SOEs in steel, cement, machinery equipment, aluminum, etc. in international markets. Nevertheless, the competition between Chinese SOEs and Southeast Asia SOEs in the domestic markets of Southeast Asia countries may become intense in near future.

Current negotiations and rules are not specifically tailored to SOEs except for the Government Procurement Agreement. However, discrimination from the area of government procurement is not a big interest for China. Some countries, such as the U.S. and the EU, based on reciprocity, allow discrimination against Chinese enterprises in their government procurement in recent years although Chinese enterprises are not excluded from participating in the bidding process.[1108] However, such pressure is not profound for China, whose market share in the EU or US government procurement is not large. China's investment, particularly done by SOEs, is primarily in infrastructure (railways, high ways, transportation) in developing countries, like Africa, Latin America and Asia (Thailand and Indonesia) in the forms of build-operate-transfer or build-transfer financed by export-import banks at low or no interest. These activities are more in the nature of bilateral economic cooperation/governmental assistance at national levels, rather than purely commercial activities. For instance, the "one-belt and one road" strategy. Hence, the government

[1108] *See* Frédéric Simon, "EU to Confront China with 'Reciprocity' in Public Contracts," EURACTIV, 9 Mar. 2012. China is not a Party to the Government Procurement Agreement, and is in the process of negotiations. *See* WTO, Government Procurement Agreement: Parties, Observers and Accession, https://www.wto.org/english/tratop_e/gproc_e/memobs_e.htm

procurement negotiations and the practice of government procurement of other members are not of great interest for Chinese SOEs.

Pressure coming from increasing trade remedies cases brought against China and other countries with significant presence of SOEs receiving various advantages[1109] is not intense enough given that current WTO rules are not sufficient to address the problem of SOEs receiving advantages. More and more trade remedies cases are brought based on the perception of "fair trade" through countervailing duties (CVDs).[1110] The scope for unfair trade allegations is open-ended.[1111] Grants of advantages to SOEs can hence be captured by the notion of "unfair trade". Furthermore, there will be more cases concerning CVDs since anti-dumping cases may drop to a great extent due to the expiration of the provision regarding China's non-market economy status in 2016, which is a method of calculation applicable to China in the imposition of anti-dumping duties against imports from China.[1112] However, the outcomes of these disputes based on current WTO rules regarding trade remedies do not put much pressure on China, except for a political unfriendly environment for China.

One motive for China might be having a set of new rules with general application in exchange for eliminating relevant specific commitments undertaken by China upon their accession to the WTO. For instance, the specific commitment undertaken by China not to impose export duties.[1113] To that end, new rules will be applicable to all Members, rather than to a limited number of Members, who will feel as though they are being singled out for harsher treatment.[1114] However, in practice, it is impossible to renegotiate specific commitments undertaken upon accession. If China wants to

[1109] For instance, developed countries, such as the U.S., Australia, Canada and New Zealand, take into account the difference between SOEs and POEs in imposing CVDs or anti-dumping duties on goods largely related to SOEs.
[1110] The argument of "fair trade" is widely used, and particularly, is harmonized to reflect political and ideological objectives. *See* Dominick Salvatore (edited), *Protectionism and World Welfare* (Cambridge England: Cambridge University Press, 1993), 38.
[1111] *Id*., at 40; Jagdish Bhagwati, *The World Trading System at Risk* (Princeton University Press, 1991), 14.
[1112] Edwin Vermulst and Brian Gatta, "Concurrent Trade Defense Investigations in the EU, the EU's New Anti-Subsidy Practice Against China, and the Future of Both," 11 (3) *World Trade Review* (2012): 527–553.
[1113] Other examples can be found, for instance, the Russian Federation is the only WTO Member having undertaken WTO-plus obligations on the use of export taxes on fossil fuels. *See* WTO Working Party on the Accession of the Russian Federation, *Report of the Working Party on the Accession of the Russian Federation to the World Trade Organization*, WT/ACC/RUS/70, WT/MIN(11)/2, 17 Nov. 2011, para. 625.
[1114] Mark Wu, "The 'China, Inc.' Challenge to Global Trade Governance," *Harvard International Law Journal*, Vol. 57 (May 13, 2016): 47.

initiate the renegotiation, other trading partners will ask for compensation. Other members will also ask for renegotiating on their accession commitments.

There is, however, much pressure coming from the investment area. More and more investment restrictions are imposed on SOEs by foreign governments with respect to mergers and acquisitions, and green field investment, through investment screening or investment security review for foreign investment. For instance, there are different kinds of investment reviews relating to SOEs' investments, including security concerns, environmental concerns, resources preservation concerns, and leaking research and development concerns, etc. SOEs' investments may be blocked or endure long delays, etc.[1115] It may be an incentive and pressure for China to accept new rules on SOEs at the international level if such disciplines can be balanced with liberalized rules on investment review toward SOEs. The argument can be developed that investment review by members shall take into account that the new disciplines on SOEs and their advantages at the WTO. It is better to have common rules in relation to SOEs rather than a multiplicity of different rules by different members at national levels. In addition to that, investments made by SOEs may face local litigation after entry. This creates a motive for China to accept international rules to address SOEs. To that end, on the one hand, there are competition rules disciplining SOEs within the WTO particularly in the context of receiving various advantages, and on the other hand, it is not realistic to control SOEs by blocking their investments in the first place by investment review. Hence, liberalized investment review relating to SOEs may be exchanged for having competition-like rules disciplining SOEs under the WTO. The overall package can be inclusive.

b. From the Perspective of Other Members

There appears to be no political will among current WTO Members to have a general agreement on investment.[1116] However, the willingness of other members to trade off the investment issue (trade-related investment, or only the entry issue in the investment area) can be elaborated as follows. First, it may encounter opposition from developing countries, especially LDCs, or African

[1115] Jing Li & Jun Xia, "State-owned Enterprises Face Challenges in Foreign Acquisitions," Columbia FDI Perspectives, Perspective on Topical Foreign Direct Investment Issues, No. 205, July 31, 2017.
[1116] Daniel C.K. Chow and Thomas J. Schoenbaum, *International Trade Law: Problems, Cases, and Materials,* 2nd edition (Aspen Publishers, 2012), 570.

countries regarding the investment policies.[1117] However, only touching the issue of investment review might be acceptable to them whereas they oppose rules on the full range of investment policies. Second, some developed members are not against the idea of having investment provisions at the WTO since many BITs entered by developed members usually have investment chapters.[1118] Industrial interest groups and labor unions from developed members, which are in direct competition with SOEs, particularly Chinese SOEs, will likely to lobby their governments to negotiate new disciplines on SOEs receiving advantages at the international level.[1119] Furthermore, there are many members with few SOEs who are concerned with the negative effects caused by advantages granted to SOEs, and think that the problems are international issues that need international solutions.

Third, there are different conceptions of SOEs, and government support for certain industries, and the extent of allowing government to intervene the economy. Developing members and members with significant presence of SOEs, such as Russia, Viet Nam and Malaysia, emphasize the justifications for establishing SOEs, and of giving advantages to SOEs as well as historical reasons, and think these are domestic issues. Members who are parties to the TPP, such as Malaysia, are willing to accept such rules disciplining SOEs and advantages as long as much flexibility is embodied. Meanwhile, some developed members may also want to have exceptions for their SOEs (like the TPP exceptions for SOEs),[1120] making it possible to have exceptions to new rules. To that end, exceptions under new disciplines are acceptable to both sides, i.e., developed members that want to discipline SOEs receiving advantages, and members with significant presence of SOEs.

[1117] The investment issue is sensitive at the WTO in that it is politicalized in light of opposing and divergent positions between the North and the South.

[1118] Such as the Japan-India BIT and the Japan-Mongolia BIT.

[1119] In the U.S., both the industry and labor union had lobbied for these norms in the TPP negotiations. *See* Sander Levin, "The Trans-Pacific Partnership Negotiations: The Need for Congress to Get Fully in the Game, A Report to the Council on Foreign Relations" (18 Sept. 2014), p.5, http://democrats.waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/files/documents/Levin%20Report%20to%20CFR%20on%20TPP.pdf (visited 17 Nov. 2015); "USTR: U.S. Facing Resistance On TPP SOE Proposal From Other Countries," Inside U.S. Trade (26 Aug. 2011); Sabina Dewan, "Getting State-Owned Enterprises Right in the Trans-Pacific Partnership" (23 Feb. 2012), http://www.americanprogress.org/issues/regulation/news/2012/02/23/11134/getting-state-owned-enterprises-right-in-the-trans-pacific-partnership/ (visited 17 Nov. 2015); Ian F. Fergusson et al., The Trans-Pacific Partnership (TPP) Negotiations and Issues for Congress, CRS Report for Congress R42694 (13 Dec. 2013), p. 46.

[1120] For instance, the U.S. may want to have exceptions for its SOEs, like the Commodity Credit Corporation (CCC), which is a government-owned and operated entity within the U.S. Department of Agriculture (USDA).

Finally, India is more inactive and is likely to be in line with China on this issue of SOEs and advantages. Some members that do not have direct competition with Chinese SOEs, may not give priority to the negotiations in this regard. The new disciplines would exclude sovereign wealth funds, so middle east oil members are less likely to raise opposition to rules regarding SOEs and advantages. The position of a member on the issue of having rules regarding SOEs and their advantages is primarily due to whether this member is in competition with SOEs or not.

(2) The Competition Laws Element

In assessing the prospects for a blended competition approach to SOEs, it must be kept in mind that past efforts to incorporate competition rules into the GATT/WTO system have failed. For example, international cartels were widespread during the 1930s.[1121] Against this background, the draft of the 1948 Havana Charter, which was designed to create the International Trade Organization (ITO), addressed international cartels and restrictive business practices that might frustrate market access.[1122] The ITO was never ratified. While GATT survived, it did not contain competition rules.[1123] The efforts to include competition rules probably failed due to the U.S. Congress' concern about losing its regulatory sovereignty over competition policy.[1124] In the 1950s and 1960s, due to the perception that cartels were no longer a major problem, and the fear of losing national policy autonomy in such a policy area, efforts to include provisions on restrictive business practice in GATT in 1954 and 1955 failed due to a lack of consensus on the substance.[1125] In the 1980s and 1990s, globalization and cross-border M&As progressed, as well as widespread privatization and deregulation. Consequently, there was risk that private restraints on trade, such as private monopolies or market dominance, might replace public restraints on trade after the

[1121] Stephen Woolcock, International Competition Policy and the World Trade Organization, Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, pp. 2-4.
[1122] Chapter V of the Havana Charter devoted nine articles to the subject, listing six practices that were considered harmful to trade. See Articles 46-54 in Chapter V, Final Act and Related Documents, United Nations document E/Conf. 2/78, United Nations Conference on Trade and Employment, Havana, Cuba, from 21 Nov. 1947 to 24 Mar. 1948.
[1123] Gary Clyde Hufbauer and Jisun Kim, "International Competition Policy and the WTO", Paper presented at a conference titled One Year Later: The Antitrust Modernization Commission's Report and the Challenges that Await Antitrust, New York University, Peterson Institute for International Economics, 11 Apr. 2008. https://piie.com/commentary/speeches-papers/international-competition-policy-and-wto
[1124] *See* Stephen Woolcock, International Competition Policy and the World Trade Organization, Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, pp. 12-18.
[1125] *Id*., pp. 2-4 and 12-18.

liberalization of public/governmental restraints. At the end of Uruguay Round negotiations, proposals were made to include competition rules in the WTO. These proposals ran into opposition on the grounds of the diversity of competition policies among developed countries and the lack of competition policies in many developing countries, and of its being of less priority for developing countries compared to industrial or development policies, and of the incapacity of developing countries to implement competition policies out of a lack of resources. Therefore, the GATT system had not succeeded in dealing with competition policy issues in the Uruguay Round.

Competition policies and investment issues are not new agenda items for the WTO. The Singapore Ministerial Conference in 1995 considered three issues, i.e., competition policies, investment issues and the trade facilitation issues. The Singapore Ministerial Conference established a working group (Working Group on Trade and Competition Policy, hereinafter as WGTCP) to study issues relating to the interaction between trade and competition policy.[1126] The WGTCP Working Group actually compiled disagreement/divergence among Members regarding this issue, and ceased to be active after 2003.[1127] During the course of the six years, WGTCP did work as follows: a) promoted cooperation between the WGTCP and other international organizations;[1128] b) clarified and summarized the issues and views of Members and prepared a checklist of issues for study;[1129] c) examined the relevance of fundamental WTO principles to competition policy and vice versa; and d) considered approaches to promoting cooperation and communication among members.[1130] The agenda in the WTO Doha Declaration launched in November 2001 addressed

[1126] WTO Ministerial Conference Singapore, Singapore Ministerial Declaration, WT/MIN(96)/DEC, 18 Dec. 1996, para. 20; WTO, Report (1998) of the Working Group on the Interaction between Trade and Competition Policy to the General Council, WT/WGTCP/2, 8 Dec. 1998, para. 17.

[1127] The Working Group on Trade and Competition ceased to be active in 2003. After 2003, the WTO Secretariat continues to respond to national requests for technical assistance. For more information as well as a policy debate, see the website: www.wto.org/english/tratop_e/dda_e/draft_text_gc_dg_31july04_e.htm#inves...

[1128] Other international organizations include, for instance, IMF, World Bank, OECD, and UNCTAD, all of which have observer status in the Working Group. *See* WTO, *Working Group on the Interaction between Trade and Competition Policy, Report (1997) to the General Council*, WT/WGTCP/1, 28 Nov. 1997, para 3.

[1129] Issues include the relationship between the objectives, principles, concepts, scope and instruments of trade and competition policy; stocktaking and analysis of existing instruments regarding trade and competition policy, including of experience with their application at national, regional, bilateral and WTO level. *See* WTO, *Working Group on the Interaction between Trade and Competition Policy, Report (1997) to the General Council*, WT/WGTCP/1, 28 Nov. 1997, Annex.

[1130] It refers to principles such as national treatment, transparency and most-favored-nation treatment. *See* WTO, *Report (2001) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/5, 28 Nov. 1997.

new issues such as competition policy.[1131] Ultimately, the competition policy issue was dropped from the Doha negotiations not due to fierce disagreement on the competition issue itself, but because there was disagreement on the "modalities" of negotiations on competition, mostly due to the objections of developing countries. But it is rather other issues, like the negotiations on agriculture, market access, and non-agriculture that were most fiercely debated in the Doha negotiations. In an attempt to make Doha negotiation run more smoothly, the competition issue was removed from the list.[1132]

In any event, opposition to negotiating on competition policy from developing members is reducing gradually. Many developing or small countries historically opposed such negotiations because: a) they did not have domestic competition laws or enforcement authorities of competition laws as a result of a lack of experience, capacity, and resources; and b) they wished to reserve their policy space.[1133] Their position changed somewhat after 1948 at Havana, when they favored competition rules to discipline the behavior of U.S. and European industrial firms.[1134] Nowadays, more and more members have domestic competition laws. Meanwhile, the opposition that may come from members with respect to the WTO dispute settlement mechanism covering competition rules, can be reduced if a certain degree of flexibility is employed in the new rules. For instance, members are more willing to be subject to competition policies of the OEDC, which doesn't have as strong enforcement as compared to the WTO.[1135] Solutions can be laid out so that any new competition rules at the WTO have a long transitional period, which is more attractive for some

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[1131] WTO Ministerial Conference Fourth Session Doha, 9-14 Nov. 2001, *Ministerial Declaration*, WT/MIN(01)/DEC/1, 20 Nov. 2001, paras. 23-25.

[1132] Gary Clyde Hufbauer and Jisun Kim, "International Competition Policy and the WTO", Paper presented at a conference titled One Year Later: The Antitrust Modernization Commission's Report and the Challenges that Await Antitrust, New York University, Peterson Institute for International Economics, 11 Apr. 2008.

[1133] For instance, they want to have policy space relating to industrial policies and investment screening techniques, nurture monopolistic practices in selected industries. *See* Stephen Woolcock, "International Competition Policy and the World Trade Organization," Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, p. 35.

[1134] Hufbauer and Kim, *supra* note 1132.

[1135] Russia is in negotiations with OECD for accession to the OECD. Russia has to comply with OECD's policies in order to get full and success accession to the OECD. Among many policies, the competition policy is one that Russia has made efforts to comply with and implement. It is primarily due to the fact that the OECD competition policy requires legislature, rather than strong enforcement. *See* OECD, "Statement by the OECD regarding the Status of the Accession Process with Russia & Co-operation with Ukraine," 13 Mar. 2014, http://www.oecd.org/russia/statement-by-the-oecd-regarding-the-status-of-the-accession-process-with-russia-and-co-operation-with-ukraine.htm ; OECD, "Competition Law and Policy in the Russia Federation 2013," OECD Country Studies, http://www.oecd.org/daf/competition/CompetitionLawandPolicyintheRussianFederation.pdf

members (Viet Nam) with an SOEs presence. China historically opposes including competition rules in the WTO because "competition policies were seen to be a threat" to SOEs.[1136] This opposition can be reduced based on the balanced approach. Since the competition agency and trade agency are all in one department in China, namely the Department of Commerce, there should be less concern about competing administrative interests blocking progress.

Developed members like the EU are supportive of including competition policies into the WTO and advocate exporting EU competition policy into the WTO.[1137] Canada hopes that competition policy can replace CVDs and ADs, particularly in its relations with the U.S, and has included such provisions in its many BITs and FTAs [1138] Other developed members, like Japan, are willing to have competition policies in the WTO given that many BITs they entered have competition chapters. The U.S. historically opposes this: a) due to conflicts of interest among domestic administrative agencies. The competition issues and trade issues are in hands of different domestic administrative agencies. The U.S. Trade Representatives negotiates international agreements relating to trade issues, while it is the Justice Department which is in charge of competition issues, and is not willing to handle the issue to trade representatives to negotiate at the international level; b) due to the interest conflict between the Congress and the executive branch insofar as that the Congress is not willing to hand the power over competition issues to the executive branch in the context of international negotiations; c) due to opposition from private corporations, especially MNCs, against strict competition rules at the international level;[1139] and d) the U.S. used to prefer its broader jurisdiction over competition issues for the purpose of enforcing its competition laws. The U.S. opposition has decreased to a great extent in the context of having competition rules in relation to SOEs receiving advantages. First, the U.S. has concluded many BITs and FTAs

[1136] R Langhammer, "Changing Competition Policies in Developing Countries: from policies protecting companies against competition to policies protecting competition," World Development Report Conference Berlin, Feb. 2002; Stephen Woolcock, *supra* note 1133.
[1137] Hufbauer and Kim, *supra* note 1132.
[1138] Similar efforts failed in the NAFTA, and the NAFTA Working Group on Trade and Competition does not seem to have moved any closer to this aim. Hence, Canada turned to the WTO forum. *See* Stephen Woolcock, *supra* note 1133, pp. 18-26.
[1139] The Havana Charter of 1948 was informally rejected by the U.S. Senate partly because the leading U.S. business firms feared that limitations on restrictive business practices might be used as a club against their commercial interests. *See* Hufbauer and Kim, *supra* note 1132.

containing competition rules with developing countries in the past decades.[1140] Since the beginning of this century, MNCs, particularly U.S. firms, have complained about SOEs' presence and their receiving advantages, particularly the anti-competitive practices of SOEs from China, India, Brazil, and other important emerging countries. This motivates U.S. firms to give support in the Congress to efforts to include competition policies in the WTO.[1141] Multinational corporations from the U.S. face enforcement of competition laws by developing countries, like China. U.S. MNCs have complained about the lack of transparency and due process, and that they are unfairly targeted by competition laws of other countries.[1142]

The argument that the WTO has already embraced some competition elements can support the position that the WTO is capable of embracing competition rules. The literature has examined GATT articles such as Articles II, III and XI, and some WTO Agreements such as TRIPS, GATS, and TBT, and found that they contain elements of competition policy.[1143] For instance, GATT Articles I and III:4 are concerned with the competitiveness between imported goods and domestic goods, rather than merely trade flows/trade effects/trade volume/market access.[1144] Some scholars view that subsidy rules should be looked at mainly as competition rules.[1145] It is argued that "already under existing trade rules, national competition law and practice are not exempt from, but rather subject to, the application of the dispute settlement system."[1146] However, most of the

[1140] The U.S. has free trade agreement in force with 20 countries, *see* Office of the U.S. Trade Representative, "Trade Agreement", available at https://ustr.gov/trade-agreements/bilateral-investment-treaties https://ustr.gov/trade-agreements/free-trade-agreements

[1141] Hufbauer and Kim, *supra* note 1132.

[1142] For instance, in one case regarding the prices of the patent held by Qualcomm, Qualcomm was fined by the National Development and Reform Commission (NDRC) of China. The investigation process was complained by FOEs as uncertainty and non-transparency out of division of power among different administrative agencies. The NDRC is in charge of regulating prices while the Ministry of Commerce (MOC) is in charge of cases relating to M&As, and the State Administration for Industry & Commerce is in charge of cases relating to dominant market positions. Such division of jurisdiction may lead to uncertainty for companies.

[1143] For instance, Article 40 of the TRIPS allows competition authorities in WTO members to control certain licensing agreements on competition grounds; Article 31 of the TRIPS provides for compulsory licensing as a remedy in cases where anti-competitive practices have been based on intellectual property rights; The Understanding on Commitments in Financial Services requires monopoly rights to be listed and efforts to be made to reduce them; The Reference Paper on Basic Telecommunications negotiated in 1997 prohibits cross subsidization (of non-monopoly operations with monopoly services); Articles 3,4 and 8 of the TBT.

[1144] AB Report, *Korea –Various Measures on Beef*), WT/DS161/AB/R, WT/DS169/AB/R, adopted 11 Dec. 2000.

[1145] Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009).

[1146] WTO, *Report (2003) of The Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/7, 17 July 2003, para. 89.

provisions are geared to serving specific narrow needs.[1147] None of the existing WTO Agreements deal in a systematic way with competition issues.[1148] Resorting to non-violation claims under GATT Article XXIII may address anti-competitive practices, for instance, that the benefits of market access for a WTO Member(s) are nullified by the absence of competition in a target market, and anti-competitive behavior that do not violate any part of the GATT. However, drawbacks exist that the nullification is very difficult to prove and succeed in practice.[1149] Therefore, as to the question whether current trade rules in the WTO can be utilized to address competition issues in general, answers are unclear.[1150] Therefore, as to the question whether the WTO is capable of having competition rules in relation to SOEs, the answer is probably yes partially due to the fact that competition elements have already been in the WTO.

(3) Proposed Framework

Technically speaking, it might be possible to have competition rules across all areas, including trade in goods, trade in services, and trade-related investment. The reason for specific rules tailored to SOEs can lie in that domestic competition laws usually carve out SOEs for the purpose of social and political objectives. There is a possibility of abusive use of these carve outs and exceptions in a sense that SOEs may abuse their market dominant positions. In order to constrain such abuses, it is necessary to have competition rules tailored to advantages associated with SOEs at the international level. It needs to be admitted that having competition rules specifically tailored to SOEs, may cause some members to feel targeted. At least the new competition policies should apply to SOEs. The disagreement on the content of competition rules to be in the WTO includes many issues, such as core principles, transparency, non-discrimination and procedural fairness,

[1147] Stephen Woolcock, International Competition Policy and the World Trade Organization, Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, pp. 12-18; Gary Clyde Hufbauer and Jisun Kim, "International Competition Policy and the WTO", Paper presented at a conference titled One Year Later: The Antitrust Modernization Commission's Report and the Challenges that Await Antitrust, New York University, Peterson Institute for International Economics, 11 April 2008. https://piie.com/commentary/speeches-papers/international-competition-policy-and-wto

[1148] WTO, *Report (2001) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/5, 28 Nov. 1997, para. 18.

[1149] For example, the U.S. failed in clams based on Article XXIII nullification provisions. *See* Panel Report, *Japan-Measures Affecting Consumer Photographic Film and Paper (Japan-Film)*, WT/DS44R, 31 Mar. 1998.

[1150] WTO, *Report (1998) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/2, 8 Dec. 1998, para. 62.

provisions on hard core cartels, modalities for voluntary cooperation, and support for progressivity in developing countries.[1151] Nevertheless, such disagreement is much reduced in the context of advantages associated with SOEs. It is not an effort of harmonization of national competition policies.[1152] The proposal is only to incorporate competition rules in the WTO applicable to SOEs, rather than POEs. Hence, little opposition will come from privately-owned MNCs.

Many members oppose competition rules in the WTO because many models exist worldwide, and no convergence exists as to which model is to be adopted. But I only use some competition laws elements specific to SOEs: no grants of advantages to SOEs solely due to state ownership; and SOEs shall not give advantages to others that alter competition relationship. It is possible to propose to increase competition in areas dominated by SOEs. Regulations of anti-competitive behavior shall include the followings, such as SOEs shall not be givers of non-commercial assistance, consolidation of SOEs shall not be assisted by governments, de-political decision making of SOEs; independence of SOEs; non-discriminatory behavior, commercial considerations based decision-making, transparency, etc. Literature suggests that with respect to hard-core cartels for an example, countries vary as regard to what horizontal and vertical agreements reached by cartels are subject to disciplines, and the attitudes towards merges and acquisitions vary as some countries use their merger policy to advance industrial strategy by blocking foreign mergers and acquisitions in strategic sectors.[1153] To that end, these fields are very difficult to reach consensus. However, disagreements may decrease to the extent that SOEs form cartels.

[1151] WTO, *Report (2002) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/6, 9 Dec. 2002; WTO Ministerial Conference Fourth Session Doha, 9-14 Nov. 2001, *Ministerial Declaration*, WT/MIN(01)/DEC/1, 20 Nov. 2001, para. 25; WTO, *Report (2001) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/5, 28 Nov. 1997, paras. 15. 18 and 59. 61.

[1152] Harmonization efforts encounter difficulties. *See* WTO, *Report (2001) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/5, 28 Nov. 1997, para. 17.

[1153] WTO, *Report (2003) of The Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/7, 17 July, 2003, paras. 45 and 47; Vertical agreements refer to those between suppliers at different levels of the production or distribution process. *See* Stephen Woolcock, International Competition Policy and the World Trade Organization, Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, p. 8.

Keeping in mind that no multilateral agreements can be made unless big compromises can be reached, [1154] flexibility can be displayed in the following dimensions. i) To have some exceptions provisions or specific sector exception; and ii) to have some technical assistance for capacity building, transitional periods for implementation or enforcement. (See Table 26 below.)

Table 26 Proposed Framework of the Competition Law Element Approach

Areas: trade in goods; trade in services; trade-related investment;
Disciplines on SOEs in *balanced* with the review of investment entry of SOEs;
Cooperation among competition enforcement authorities; share information;
Basic/core Principles: competition neutrality:
Main obligations: • No grants of advantages to SOEs solely due to state ownership; • Requirement of making decisions solely based on commercial considerations: e.g., SOEs shall not give advantages to others; • Anti-competitive behavior regulation after receiving advantages: o No monopolistic behavior or abuse of dominant market position in so far as it may adversely affect competition in any market: including discrimination, cross-subsidization; o No horizontal restraints, including export restraints; o No vertical restraints; o Requirements of divestiture of competitive activities from monopolistic activities; • Making decisions independently from governments; • Domestic competition rules shall be applicable to SOEs;[1155] • No government-assisted or mandated mergers and acquisition of SOEs to the extent that it will lead to concentration and have anti-competitive effects;
Flexibility • Exceptions/carve outs: specifically tailored to SOEs; Technical assistance, transitional periods.

[1154] WTO, *Report (2001) of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/5, 28 Nov. 1997, para. 33; WTO, *Report (2003) of The Working Group on the Interaction between Trade and Competition Policy to the General Council*, WT/WGTCP/7, 17 July 2003, para. 67; Stephen Woolcock, International Competition Policy and the World Trade Organization, Paper for the LSE Commonwealth Business Council Trade Forum in South Africa, pp. 9-10 and 7-12.

[1155] It might be true that applying domestic competition rules to SOEs will have very different effects in different countries, such as depending on whether jurisdiction has only public or also private enforcement, the extraterritoriality issue, and so on. I think such different effects do not matter since POEs also face the same domestic competition rules as that of SOEs in one jurisdiction, as long as there is no unfair competition between POEs and SOEs in one jurisdiction. It is the exemption of applying domestic competition rules to SOEs and hence to confer regulatory advantages to SOEs that I am targeting to address. There is no need to set the standard rules on these issues (such as the availability of private enforcement, the extraterritoriality) of domestic anti-trust law, and hence, resistance from all players will be little.

Summary

From WTO members' political perspective, trade remedies approach proposals are less likely given that negotiating or amending, for instance, the definition of "public bodies" within the SCM Agreement encounters opposition, such as the argument that the balance will lose between substantive provisions regarding the grants of subsidies and the procedural provisions regarding the use of CVDs. The trade rules approach proposals are also less likely given that efforts of negotiating or amending current trade rules about monopolies in history were rare and members want to have policy space reserved for granting monopolies or exclusive rights.

In contrast, the balanced competition rules approach proposals are more likely to be implemented. Keeping in mind the idea of trade-offs, in order to achieve the competition rules proposals regarding SOEs disciplines, there are many issues can be taken into account for trade-offs, such as market access issues investment issues, etc. I picked up the element of "investment review" in particular for the balance and trade-offs.

In respect of China, although there are many complaints about China and pressure faced by China, such as the conflict of interest or competition between Chinese SOEs and SOEs from other countries, the pressure from the negotiations in the Government Procurement Agreement and the treatment towards Chinese enterprises, especially Chinese SOEs in the government procurement markets in some developed members, increasing trade remedies cases brought against China and other countries with significant presence of SOEs receiving various advantages, etc., there is much pressure coming from the investment area. More and more investment restrictions are imposed on SOEs by foreign governments with respect to mergers and acquisitions, and green field investment, through investment screening or security review for foreign investment. It makes the trade-offs possible for China between SOEs related disciplines and investment entry issues relating to SOE. As for other members, it is easier to accept partial range of investment issues to be governed by the WTO, as well as competition issues relating to SOEs.

Lastly, I proposed the most likely potential framework for the competition rules approach.

6.4 Conclusion of Chapter 6

The WTO is a more appropriate forum to implement proposals on SOEs than other fora. As a practical matter, WTO decisions are made by consensus. Although voting is possible and ministerial decisions may be attractive to Members, the WTO dispute settlement will not be available at all if there is only a stand-along ministerial decision implementing my proposals. To that end, amendment or negotiation new rules is necessary to implement my proposals. The political willingness of WTO Members has been laid out in accepting the competition rules proposals by negotiating a new agreement. The competition rules proposals are most likely to be implemented politically and technically.

Chapter 7: Conclusion

This dissertation examines the problem of SOEs receiving various advantages within the WTO framework. Namely, whether current WTO rules are sufficient to address the problem of SOEs receiving various advantages. I conclude that they are not, and make recommendations to improve them. In chapter one, I examined the global presence of SOEs and various advantages they receive, and find that SOEs are still pervasive particularly in emerging country and SOEs receive typically three kinds of advantages, i.e., financial advantages, such as money transfer and provision of goods/services from governments; monopolies and exclusive rights, such as exclusive rights to produce, distribute, export and import; and regulatory advantages such as favored treatment by competition laws and selective enforcement. Then I explained that SOEs receiving advantages has been perceived as problematic historically and economically. I traced the history of SOEs in the world economy and explain how the grant of advantages to SOEs has been perceived as more problematic over time. I also examined historical efforts regionally and internationally to tackle the problems, including privatization waves, decreasing subsidies, and regulations developed in early GATT, the EU, the TPP Agreement and other FTAs negotiations recently. Economically, I demonstrate that grants of advantages to SOEs undermine gains from international trade to the extent that they reduce world welfare, and undermine international trade agreements, in light of SOEs' objective to maximize revenue and expand scale, SOEs' strong lobbying power, and SOEs' tendency to engage in anti-competitive behavior and be influenced by governments.

In chapter two, I used the empirical method to collect data and information about the problem in the context of Chinese SOEs, examined the extent, nature, and effect of advantages granted to Chinese SOEs, and why there is little incentive in China to deal with the problems. I found that Chinese SOEs get more financial advantages than POEs, in a less transparent way, and in more various forms, such as lower cost of capital, the right to use land, lower resources fees, and lighter tax burden. SOEs also act as givers of capital and inputs to others. SOEs are more likely to receive monopolies and exclusive rights, and afterwards, are more likely to engage in anti-competitive behavior and behavior influenced by governments. SOEs are more likely to receive regulatory advantages, such as having mergers and acquisitions assisted by the Chinese Government and exempted from competition laws. The impacts are different depending on the industry or sector

SOEs are in. There is little incentive to change current practices in China due to the common interest among SOEs, governments, and the communist party.

In chapter three, I laid out the existing WTO rules that can discipline the three advantages granted to SOEs in the area of trade in goods, trade in services, and trade-related investment, and the special rules agreed to by China in its accession to the WTO with respect to advantages granted to SOEs. Then, I explained how the current WTO rules cannot cover some issues related to SOEs, and how the current rules are deficient even if they can be maximized to address issues related to SOEs receiving advantages in those three aspects. There are specific problems in respect of three kinds of advantages given to SOEs. For instance, with respect to financial advantages, I examined five issues, which are very much distinct from one another, such as the issue of SOEs as givers of advantages, the problem of upstream subsidies in the context of Chinese SOEs, the financial advantages Chinese SOEs receive prior to privatizations, especially in the case of partial privatizations with a transfer of control, etc. These issues are hardly caught by the SCM Agreement. With respect to monopolies and exclusive rights granted to SOEs, as well as regulatory advantages granted to SOEs, the issues are primarily divided into two types, i.e., one is about grants per se, and the other is about behavior after receiving monopolies, exclusive rights, or regulatory advantages. Historically, the WTO rules allow grants of monopolies or exclusive rights. WTO jurisprudence has somewhat limited the grants of exclusive rights or monopolies themselves. The current WTO rules to some degree discipline some behavior of SOEs after they receive advantages, but are not yet sufficient. Not all SOEs with monopolies or exclusive rights are subject to behavior regulations and only some behavior is regulated, leaving much behavior of SOEs after receiving monopolies or exclusive rights undisciplined, such as discriminatory behavior against foreigners, and some anticompetitive behavior (abuse of dominant positions, cross-subsidization, collusion and exclusion behavior among giant SOEs, including export restraints). With respect to regulatory advantages given to SOEs, such as exemption from domestic competition laws, it is hard to regulate them under the SCM Agreement. Second, overseeing the enforcement of domestic regulatory laws is largely outside the WTO's jurisdiction. Hence, the selective enforcement of domestic competition laws and anti-bribery laws in favor of SOEs are not disciplined by the WTO rules.

In chapter four, I relied on the comparative approach to put forth my suggestions by looking at the European Union rules and the Trans-Pacific Partnership Agreement. I came up with three kinds of suggestions, one is the trade remedies approach, the second one is the trade rules approach, and the last one is the competition law elements approach. They have some commonalities. The trade remedies approach proposes to treat as public bodies those SOEs who are under the government's meaningful control and are given monopolies or exclusive rights or dominant positions due to regulatory advantages in a particular industry within the meaning of the SCM Agreement.

With respect to trade rules approach, in regards to financial advantages, I proposed to expand the coverage of GATT Article XVII and make commercial considerations in GATT Article XVII:1(b) independent. With respect to SOEs with monopolies or exclusive rights, I proposed modify current trade rules, to expand the coverage of GATT Article XVII to all SOEs with all kinds of monopolies and exclusive rights, to embrace the national treatment obligation in Article XVII, to expand the coverage of the obligation of commercial considerations applicable to GATS as well, and to make the "commercial considerations" obligation an independent obligation.

With respect to competition rules approach, in terms of financial advantages, I proposed to prohibit SOEs from giving financial advantages to others, particularly SOEs, to the extent that such behavior affect or distorts competition. With respect to monopolies or exclusive rights given to SOEs, I proposed to regulate the behavior of SOEs which receive monopolies or exclusive rights through competition rules. With respect to regulatory advantages given to SOEs, I proposed to prohibit government-assisted or mandated mergers and acquisitions of SOEs to the extent that it will lead to concentration and have anti-competitive effects.

In chapter five, I assessed the proposals within the WTO. First, the WTO is a more appropriate form to implement the proposals due to its legitimacy in having competition elements rules disciplining SOEs. In contrast, other fora outside the WTO, such as BITs and FTAs, are not likely to succeed in addressing the problem of SOEs receiving various advantages due to political difficulties or the lack of participation by countries with many SOEs. Second, I examined the legal techniques that can be utilized within the WTO to implement these proposals. In practice, consensus is practiced for negotiation, amendment, ministerial conference decisions or general

council decisions. Theoretically, amendment requires consent from two-thirds of members, and Ministerial Conference decisions and General Council decisions can be made by a majority voting. The legal effects of Ministerial Conference decisions or General Council decisions are not clear if they are adopted by voting. Third, from WTO members' political perspective, the balanced competition rules approach proposals are more likely to be implemented. Keeping in mind the idea of trade-offs, in order to achieve the competition rules proposals regarding SOEs disciplines, there are many issues can be taken into account for trade-offs, such as market access issue, investment issues, etc. In respect of China, more and more investment restrictions are imposed on SOEs by foreign governments with respect to mergers and acquisitions, and green field investment, through investment screening or investment security review for foreign investment. It makes the trade-offs possible for China between SOEs related disciplines and investment entry issues relating to SOEs. As for other members, it is easier to accept partial range of investment issues to be governed by the WTO, as well as competition issues relating to SOEs. Members nowadays are more likely to accept the competition law elements embodied in the WTO rules than decades ago. In the end, I proposed the most likely potential framework for improving WTO negotiation of SOEs.

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